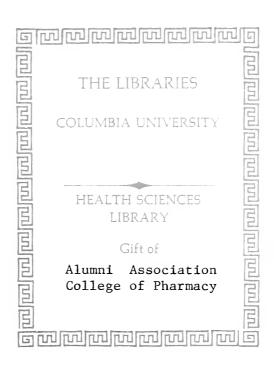


# Columbia University in the City of New York

# ANNUAL REPORTS





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## ANNUAL REPORT

OF THE

## PRESIDENT AND TREASURER

TO THE

## **TRUSTEES**

WITH ACCOMPANYING DOCUMENTS

FOR THE YEAR ENDING

JUNE 30, 1939



MORNINGSIDE HEIGHTS · NEW YORK

Spac-6011 RA 982 , N48 07 1939

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JUNE 10, 1939

# REPORT OF THE PRESIDENT OF COLUMBIA UNIVERSITY

FOR THE YEAR ENDING JUNE 30, 1939

#### To the Trustees:

There is presented herewith, as prescribed by the Statutes, the Annual Report on the condition and needs of the University. Accompanying this report and included in it are also the annual reports of the several Deans, Directors and other chief administrative officers of the University. Without exception, these reports contain information and recommendations which should receive most careful attention.

It may well be doubted whether any earlier year in the history of the University has been equally noteworthy or marked by more important and significant happenings. Outstanding is the visit of Their Majesties, the King and Queen of Great Britain, made on June

The Year 1938–39

To, 1939, at Their Majesties' own most welcome suggestion.

The international Congress on Education for Democracy, held on August 15-17, 1939, attracted the attention of the whole world and despite the overhanging clouds of a threatened war, the attendance was unprecedented both in number and in representative character. There has been during the year a steady flow of outstanding contributions to literature, to science and to the understanding and interpretation of public policy both in this country and in other lands. Service by members of the academic staff of the University to the governments of the city, the state and the nation, extending over many different fields of interest, has been constant, important and influential. As from the ranks of the University's staff older and highly honored scholars have passed into retirement or from life itself, their places have been taken by younger men of greatest promise, and there is now no reason to fear that the University's scholarly service through the generation which is to come will be less important or less valuable than it has been during the generation that has come to its end.

Some of the more important happenings of the year include a revision of the Statutes of the University and of the By-Laws of the Trustees, made for the purpose of bringing both Statutes and By-Laws, without

changing any of their essential principles, into closer conformity with the actual practices of present-day University administration; the work of the Faculties of Political Science, Philosophy and Pure Science in discussing thoroughly and taking action upon the most important Report on the Degree of Doctor of Philosophy prepared by a special committee of which Professor Woodbridge was chairman; the appointment by the Trustees of a special committee of University officers to oversee the preparation of a comprehensive and interpretative history of King's College and Columbia University; the establishment, by the provisions of the will of the late Mrs. Ellen Mills Borne, of the John E. Borne Professorship of Medical and Surgical Research, and the appointment by the Trustees of Dr. Alphonse R. Dochez to be the first incumbent of this chair; the startling demonstration, of important scientific significance, by Professors John R. Dunning and Enrico Fermi of the Department of Physics, of the liberation, in hitherto unapproached amount, of atomic energy by the splitting of uranium atoms by neutrons, following the chemical discovery of the split atoms by Hahn in Berlin; the completion, after long years of intensive study on the part of Professor Edwin H. Armstrong, of the Department of Electrical Engineering, of his method of reducing the effect of disturbances in radio signaling caused by natural and man-made static; the success of the investigation undertaken by Professor Colin G. Fink, of the Department of Chemical Engineering, at the request of the California Historical Society, resulting in definite scientific proof of the authenticity of the engraved brass plate recently discovered on the California coast, and his attribution of the plate to Sir Francis Drake who discovered California in 1579; the success attained by Professor Harold C. Urey, of the Department of Chemistry, in concentrating by chemical methods the heavy isotope of nitrogen, an element that will prove highly useful in biological, chemical and physical investigations; the exercises in commemoration of the nine hundredth anniversary of the introduction of Christianity into Eastern Europe by Saint Stephen of Hungary, that were held in the McMillin Academic Theater on November 18, 1938; the commemoration at the Casa de las Españas, on November 21, 1938, of the fiftieth anniversary of the death of Domingo Faustino Sarmiento, the outstanding man of letters, educator and statesman of Spanish America in the nineteenth century, and founder of the intellectual life of Argentina;

the dedication, on May 28, 1939, of the new organ in St. Paul's Chapel, which fulfills all that was expected of it; the meeting at the University from August 28 to September 9, 1939, of the newly established English Institute; the placing in the Army Medical Museum at Washington, as a loan for an indefinite period, of the late Dr. George S. Huntington's important anatomical collection, now the property of the University;

The distinction conferred upon the University through the selection of many of its members to render important scholarly or public service, including the appointment of Dean Carl W. Ackerman, of the School of Journalism, as a member of the Social Service Mission to Venezuela; the election of Professor Benjamin R. Andrews, of Teachers College, to life membership in the American Home Economics Association; the continuation of the service of Professor Adolf A. Berle, Jr., of the School of Law, as Assistant Secretary of State of the United States; the service of Professor Marston T. Bogert, of the Department of Chemistry, as President of the International Union of Chemistry; the designation of Professor James C. Bonbright, of the School of Business, as Chairman of the Power Authority of the State of New York; the continuation of the service of Dr. Eveline M. Burns, of the Department of Economics, as Principal Economics Consultant, Social Security Board; the appointment of Professor Joseph P. Chamberlain, of the Department of Public Law and Government, to be George Eastman Professor at Oxford University for 1939-40; the election of Professor Anna M. Cooley, of Teachers College, to life membership in the American Home Economics Association; the appointment by the Department of the Interior, United States Housing Authority, of Mr. Carl Feiss, of the School of Architecture, as Housing Consultant, New York City; the election of Professor Harry D. Gideonse, of the Department of Economics at Barnard College, to be President of Brooklyn College; the choice of Professor Louis P. Hammett, of the Department of Chemistry, to be Chairman of the New York Section of the American Chemical Society; the invitation to Professor Robert M. MacIver, of the Department of Social Science, to deliver the Edward Douglas White Lectures on Citizenship at the University of Louisiana; the appointment of Professor Roswell Magill, of the School of Law, as Chairman of the Public Examining Board appointed by the President of the New York Stock Exchange with the approval of the Chairman of the Securities and Exchange Commission, and the invitation to Professor Magill to advise the Government of Cuba as to the reorganization of its system of tax administration; the election of Professor Allan Nevins, of the Department of History, to the Council and Executive Committee of the American Historical Association; the service of Professor Edwin W. Patterson, of the School of Law, as Chairman of the Committee on Insurance Law Revision of the Insurance Department of the State of New York; the election of Dean Willard C. Rappleye, of the Medical School, as President of the Advisory Council on Medical Education of the Association of American Medical Colleges; the invitation to Professor Lindsay Rogers, of the Department of Public Law and Government, to deliver a series of lectures on the Walgreen Foundation at the University of Chicago, and his designation as one of the American delegates to the Primer Congreso Pan Americano de Municipios, which met at Havana in November, 1938; the selection of Professor Henry C. Sherman, of the Department of Chemistry, to serve as Consultant to the Federal Food and Drug Administration, his appointment as Chairman of the Advisory Committee on Food, Drugs and Sanitation of the New York City Department of Health, and his election to be President of the American Institute of Nutrition; the invitation to Professor James T. Shotwell, of the Department of History, to deliver the Meier Katz Memorial Lectures at the Walter Hines Page School of International Relations of Johns Hopkins University; the appointment of Professor Carl S. Shoup, of the School of Business, to make an official study, in association with Professor Roswell Magill, of the Cuban tax system; the election of Professor Edmund W. Sinnott, of the Department of Botany, to membership in the American Philosophical Society; of Professor Willard Waller, of the Department of Social Science at Barnard College, to be President of the Eastern Sociological Society; of Mr. Edgar I. Williams, of the School of Architecture, to be President of the Architectural League; and the delivery by Professor Leo Wolman, of the Department of Economics, of a series of lectures at McGill University in Montreal;

The honors conferred upon many members of the University staff, including the election of Professor Marston T. Bogert, of the Department of Chemistry, to Honorary Membership in the Chemists Club; the award to Professor Joseph P. Chamberlain, of the Department of Public Law

and Government, of the gold medal of the Pi Lambda Phi fraternity given each year to the American deemed the best "exponent of tolerance"; to Professor Harold F. Clark, of Teachers College, of the degree of Doctor of Laws by Asbury College; the election of Professor John Maurice Clark, of the Department of Economics, to be Foreign Member of the Royal Swedish Academy of Science; the award to President Henry Sloane Coffin, of the Union Theological Seminary, of the degree of Doctor of Sacred Theology by the Academic Council of the Paris Theological Seminary; to Dr. Arthur P. Coleman, of the Department of East European Languages of the Laureate (gold) of the Polish Academy of Literature; to Professor Emeritus John Dewey, of the Department of Philosophy, of the Order of the Brilliant Jade by the Chinese Government; the election of Professor Colin G. Fink, of the Department of Chemical Engineering, as Honorary Member of the California Historical Society; of Professor Frederick P. Gay, of the Department of Bacteriology, as a Member of the National Academy of Sciences; and of James T. Grady, Director of Public Information, to be Fellow of the American Institute of the City of New York, in recognition of his "pioneer work in promoting accuracy of science recording, which has resulted in heightened confidence in and appreciation of the work of scientists in the public mind"; the award to Dr. Luther H. Gulick, Director of the Institute of Public Administration, of the degree of Doctor of Letters by Oberlin College; to Professor Carlton J. H. Hayes, of the Department of History, of the degree of Doctor of Humane Letters by Williams College; to Professor Milo Hellman, of the School of Dental and Oral Surgery, of the Albert H. Letcham Memorial Award of the American Board of Orthodontists, for his "contributions to the science and art of orthodontia"; to Professor Francis Hodgkinson, of the Department of Mechanical Engineering, of the Holley Medal of the American Society of Mechanical Engineers, for his service in the development of the steam turbine; the election of Professor Douglas Johnson, of the Department of Geology, as Foreign Correspondent of the Geological Society of London; the award to Chaplain Raymond C. Knox of the degree of Doctor of Divinity by the University of King's College, Halifax, on the occasion of the Sesquicentennial Celebration of that institution, at which Columbia University was represented by Chaplain Knox and Mr. Milton Halsey Thomas; to Nicholas M. McKnight,

Associate Dean of Columbia College, of the degree of Doctor of Letters by Muhlenberg College; to Professor Ward J. MacNeal, of the New York Post-Graduate Medical School, of the degree of Doctor of Science by the University of Michigan; the election of Professor Clarence A. Manning, of the Department of East European Languages, as Member of the School of Slavonic and East European Studies of the University of London; also the bestowal upon him of the insignia of Commander of the Order of the Grand Prince Gediminas of Lithuania, and of the Commander's Cross of the Order of Three Stars, by the Government of Latvia, in recognition of his services in fostering friendly relations between Latvia and the United States and in making the American people acquainted with the achievements of Latvia; the award to Professor John M. Nelson, of the Department of Chemistry, of the William H. Nichols Medal of the New York Section of the American Chemical Society, for his important contributions to the chemistry of life processes; to Mr. Thomas I. Parkinson, Trustee, the degree of Doctor of Laws by Colgate University; to Dr. Willard C. Rappleye, Dean of the Medical School, of the degree of Doctor of Science by Trinity College, Connecticut; the designation of Dr. Henry H. Rusby, Dean Emeritus of the College of Pharmacy, as the recipient of the Fluckiger International Gold Medal awarded quinquennially by the German Apotheker Verein to an outstanding pharmaceutical investigator; the award to Dr. William F. Russell, Dean of Teachers College, of the degree of Paed.D. by the University of Sofia; to Professor James T. Shotwell, of the Department of History, of the degree of Doctor of Laws by Johns Hopkins University; to Professor Horatio Smith, of the Department of Romance Languages, of the degree of Honorary Doctor by the University of Grenoble, on the occasion of the celebration in May, 1939, of the sixth centenary of that institution, at which Columbia University was represented by Professor Smith; the election of Professor Philip E. Smith, of the Department of Anatomy, as a Member of the National Academy of Sciences; the award to Rev. Stanislaus R. Sobieniowski, teacher in Polish courses in University Extension, of the Laureate (silver) of the Polish Academy of Literature; to Professor Sarah M. Sturtevant, of Teachers College, of the degree of Doctor of Pedagogy by Russell Sage College; to Sir Raymond Unwin, Visiting Professor of Architecture, of the Ebenezer Howard Memorial Medal by the

Garden Cities and Town Planning Association of England; to Professor Harold C. Urey, of the Department of Chemistry, of the degree of Doctor of Science by the University of Newark; to Mr. Thomas J. Watson, Trustee, of the degree of Doctor of Commercial Science by Oglethorpe University, and his designation as Commander, First Grade, of the Royal Order of Danebrog, Denmark; the award to Professor Jesse F. Williams, of Teachers College, of the degree of Doctor of Science by Rollins College, and of the Gulick Medal by the Health Education Teachers Association of the New York City High Schools, for outstanding work in physical education; and the bestowal upon Professor John H. Wuorinen, of the Department of History, of the decoration of Knight of the Order of the White Rose, First Class, by the Republic of Finland;

The publication during the year of a long and varied list of important books by members of the University staff, among which may be named Of Human Freedom, by Professor Jacques Barzun, of the Department of History; The History of the Greek and Roman Theater, by Professor Margarete Bieber, of the Department of Fine Arts and Archaeology; Rural Australia and New Zealand, by Professor Edmund de S. Brunner, of Teachers College; Which Way America?, by Professor Lyman Bryson, of Teachers College; The College Charts Its Course, by Professor R. Freeman Butts, of Teachers College; France: A History of National Economics, 1789-1939, by Professor Shepard B. Clough, of the Department of History; A New England City and the November Uprising, by Dr. Arthur P. Coleman, of the Department of East European Languages; The Book of Bells and Your Child's Music, by Mrs. Satis N. Coleman, of Teachers College; The Prospects of American Democracy, by Professor George S. Counts, of Teachers College; Applied General Statistics, by Professor Frederick E. Croxton, of the Department of Social Science, and Professor Dudley J. Cowden, of the University of North Carolina; Neutrality Laws, Regulations and Treaties, by Professors Francis Deák and Philip C. Jessup, of the Faculty of Law; Freedom and Culture, by Professor Emeritus John Dewey, of the Department of Philosophy; the important contributions to the literature of Greek history and archaeology by Professor William Bell Dinsmoor, of the Department of Fine Arts and Archaeology; Emotions and Bodily Changes (second edition), by Dr. H. Flanders Dunbar, of the Departments of Medicine

and Psychiatry; The American Teacher: Evolution of a Profession in a Democracy, by Professor Willard S. Elsbree, of Teachers College; Standards for College Buildings, by Professor Edward S. Evenden (with Professors George N. Strayer and Nickolaus L. Engelhardt), of Teachers College; Religious Trends in English Poetry, by Professor Hoxie N. Fairchild, of the Department of English and Comparative Literature; Toward an Understanding of the U.S.S.R., by Dr. Michael T. Florinsky, of the Department of Economics; The Illusion of Economic Stability, by Dr. Eli Ginzberg, of the Department of Economics; Foundations of Language, by Professor Louis H. Gray, of the Department of Indo-Iranian and Comparative Linguistics; American Problems of To-Day, by Mr. Louis M. Hacker, of the Department of Economics; Some European Architectural Libraries, by Mr. Talbot Hamlin, Librarian of the Avery Architectural Library, being a volume in the "Columbia University Studies in Library Service"; Industrial Political Economy, by Professor Edward H. Hempel, of the Department of Industrial Engineering; Paideia: The Ideals of Greek Culture, a translation from the German by Professor Gilbert Highet, of the Department of Greek and Latin; Collected Classical Papers, by Professor Gertrude M. Hirst, of the Department of Greek and Latin at Barnard College; Frost Flower, by Professor Helen Hull, of the Department of English and Comparative Literature; Conflicting Theories of Education, by Professor Isaac J. Kandel, of Teachers College; Vocations for Girls, by Professor Harry D. Kitson (with Mary R. Lingenfelter), of Teachers College; The Ruling Class, by Gaetano Mosca, being a translation by Hannah D. Kahn, edited and revised, with an introduction by Professor Arthur Livingston, of the Department of Romance Languages; Geomorphology: An Introduction to the Study of Landscapes, by Professor Armin K. Lobeck, of the Department of Geology; third edition of Modern English Readings, by Professors Roger S. Loomis and Donald L. Clark, of the Department of English and Comparative Literature; Knowledge for What? The Place of Social Science in American Culture, by Professor Robert S. Lynd, of the Department of Social Science; Leviathan and the People, by Professor Robert M. MacIver, of the Department of Social Science, being the Edward Douglas White Lectures delivered at Louisiana State University; Federal Administrators, by Professor Arthur W. Macmahon and

Dr. John D. Millett, of the Department of Public Law and Government; The Cuban Fiscal System 1939, by Professor Roswell Magill, of the School of Law, and Professor Carl S. Shoup, of the School of Business; Music in My Time, by Professor Daniel Gregory Mason, of the Department of Music; Images et Romans, by Professor Marguerite Mespoulet, of the Department of Romance Languages at Barnard College; After Seven Years, by Professor Raymond Moley, of the Department of Government at Barnard College; Adaptability of School Systems, by Professor Paul R. Mort (with Francis G. Cornell), of Teachers College; Educational Psychology, by Professor James L. Mursell, of Teachers College; Fremont, Pathmarker of the West, by Professor Allan Nevins, of the Department of History, and The Heritage of America, edited by Professor Nevins and Professor Henry Steele Commager, also of the Department of History; The North Briton, by Dr. George Nobbe, of the Department of English and Comparative Literature; Money in the Law, by Visiting Professor Arthur Nussbaum, of the School of Law; Italy, by Professor Giuseppe Prezzolini, of the Department of Romance Languages; Fragments from Babel, by Professor Emeritus John Dyneley Prince, of the Department of East European Languages; The Life and Times of William Howard Taft, by Professor Henry F. Pringle, of the School of Journalism; Louis-Sébastien Mercier in Germany: His Vogue and Influence in the Eighteenth Century, by Dr. William W. Pusey, III, of the Department of Germanic Languages, being a volume in the "Columbia University Germanic Studies"; Runner of the Mountain Tops: The Life of Louis Agassiz, by Professor Mabel L. Robinson, of the Department of English and Comparative Literature; The Mechanism of Thought, Imagery, and Hallucination, by Professor Joshua Rosett, of the Department of Neurology; Letters of Ralph Waldo Emerson and Letters to Emma Lazarus, edited by Professor Ralph L. Rusk, of the Department of English and Comparative Literature; Contemporary Monetary Theory, by Dr. Raymond J. Saulnier, of the Department of Economics; History of History, by Professor James T. Shotwell, of the Department of History; The Psychology of Parent-Child Relationships, by Professor Percival M. Symonds, of Teachers College; Your City, by Professor Edward L. Thorndike, of Teachers College; D. H. Lawrence and Susan His Cow, by Professor William York Tindall, of the Department of

English and Comparative Literature; The Spirit of Voltaire, by Professor Norman L. Torrey, of the Department of Romance Languages; Matthew Arnold, by Professor Lionel Trilling, of the Department of English and Comparative Literature; Richard Upjohn: Architect and Churchman, by Professor Everard M. Upjohn, of the Department of Fine Arts and Archaeology; Shakespeare and Collected Poems 1922–1938, by Professor Mark Van Doren, of the Department of English and Comparative Literature; Transportation in the United States, by Professor Thurman W. Van Metre, of the School of Business; Elizabethan and Jacobean Playwrights, by Dr. Henry W. Wells, of the Department of English and Comparative Literature; Psychological Issues, being selected papers of Professor Robert S. Woodworth, of the Department of Psychology, published by the Columbia University Press on the occasion of the seventieth birthday anniversary, on October 17, 1939, of Professor Woodworth;

The publication by the Columbia University Press of volumes by former members of the teaching staff, including German Criticism of Gustave Flaubert 1857–1930, by Dr. E. E. Freienmuth von Helms, of the Department of German at Barnard College; and Sir Walter Scott, Bart., by Sir Herbert Grierson, formerly Visiting Professor of English Literature; also the publication by the Columbia University Press, in the series "Studies in History, Economics and Public Law," of Grants-in-Aid under the Public Works Administration, by Dr. J. Kerwin Williams, sometime University Fellow in Public Law;

The visits made to the University by many distinguished and interesting persons, including His Excellency Dr. Arturo Alessandri, former President of the Republic of Chile; The Rt. Hon. Earl Baldwin of Bewdley, former Prime Minister of Great Britain; Hon. William H. Barrett, United States District Judge, of Augusta, Georgia; Dr. Charles A. Beard, historian; Dr. Eduard Beneš, former President of Czechoslovakia; Ernest Bevin, of London, General Secretary of the Transport and General Workers Union; General Evangeline Booth, International Head of the Salvation Army; Hon. Mortimer W. Byers, United States Judge for the Eastern District of New York; Chris L. Christensen, Dean of the College of Agriculture of the University of Wisconsin; Hon. John M. Ciechanowski, former Minister Plenipotentiary and Envoy Extraordinary from Poland to the United States; Professor Fred Clarke, Director of the Institute

of Education of the University of London; Lionel Curtis, of Oxford; Hon. Herbert Vere Evatt, Justice of the Federal High Court, Sydney, Australia; Count Ferry de Fontnouvelle, French Consul General at New York; President Guy Stanton Ford, of the University of Minnesota; Hon. George Ghika, Hungarian Consul General at New York; President Frank P. Graham, of the University of North Carolina; William Green, President of the American Federation of Labor; Sir Richard Gregory of London, Editor of Nature; Godfrey Haggard, British Consul General at New York; Professor Oscar Halecki, of the University of Warsaw; President Ernest O. Holland, of Washington State College; Mr. Vladimír Hurban, Czechoslovak Minister at Washington; Professor Mordecai M. Kaplan, of the Jewish Theological Seminary; Madame V. Wellington Koo, wife of the Chinese Ambassador at Paris; Sir Walter Layton, Editor of the London Economist; the Countess of Listowel, of London; the Marquess of Lothian, British Ambassador at Washington; President Mildred H. McAfee, of Wellesley College; L. R. Macgregor, Australian Trade Commissioner to the United States; Sir William McLean, of the British Colonial Office; Rt. Rev. Monsignor Joseph H. McMahon, Rector of the Church of Our Lady of Lourdes, New York; Mr. Jan Masaryk, former Czechoslovak Minister in London; Principal John Murray, of the University College of the South West of England, Exeter; Mrs. Alva Myrdal, Director of the Training College for Nursery School and Kindergarten Teachers, Stockholm, Sweden; Professor Martin Nilsson, Rector of the University of Lund, Sweden; Dr. Armando de Salles Oliveira, former Governor of São Paulo; Sir George Paish, British economist; Professor Anton Charles Pegis, of Fordham University; Hon. John Pelényi, Hungarian Minister at Washington; Rt. Hon. Lord Eustace Percy, Rector of Newcastle Division of Durham University; Clarence Poe, Editor of The Progressive Farmer; Col. Theodore Roosevelt; Sir William David Ross, Provost of Oriel College, Oxford; Lord Rothschild, of London; Count de Saint-Quentin, French Ambassador at Washington; His Excellency Hu Shih, Chinese Ambassador at Washington; Hon. T. V. Smith, Congressman from Illinois; A. J. Stoddard, Superintendent of Schools at Philadelphia; Sir Ronald Storrs, formerly Civil Governor of Jerusalem and Judaea; Count van der Straten-Ponthoz, Belgian Ambassador at Washington; Hon. John W. Studebaker, United States Commissioner of Education; Louis J. Taber, Master of National Grange; David Cleghorn Thomson, General Secretary of the Society for the Protection of Science and Learning, of England; Rt. Rev. Henry St. George Tucker, D.D., Presiding Bishop of the Protestant Episcopal Church in the United States; Sir Richard Tute, Chief Justice of the Bahama Islands; Dr. Paul van Zeeland, former Prime Minister of Belgium; Hon. Sumner Welles, Under Secretary of State; President Ernest H. Wilkins, of Oberlin College; Dr. Karl Joseph Wirth, former Chancellor of the German Reich; Bishop Paul Yu-Pin, Special Envoy of the Chinese National Government Relief Commission; M. Jean Zay, Minister of National Education of the French Republic; and Sir Alfred Zimmern, Professor of International Relations at the University of Oxford;

The promotion, following the adoption of the budget, of two Associate Professors to be Professors; of nine Assistant Professors and one Lecturer to be Associate Professors; of nine Associates and five Instructors to be Assistant Professors; of two Associate Clinical Professors and one Assistant Clinical Professor to be Clinical Professors; and of five Associates and two Instructors to be Assistant Clinical Professors;

The transfer to Columbia from other universities or from other fields of service, of two Professors, one Associate Professor, two Assistant Professors, and four Clinical Professors; and changes of title in the case of nine present officers of the University;

The retirement from active service, at their own request, of the following officers of the University: On January 1, 1939, Maurice A. Bigelow, Professor of Biology in Teachers College, with the title of Professor Emeritus; on February 1, 1939, Carleton J. Lynde, Professor of Physics in Teachers College, and May B. Van Arsdale, Professor of Household Arts in Teachers College, each with the title of Professor Emeritus; on June 30, 1939, Elijah William Bagster-Collins, Associate Professor of German in Teachers College; Tracy E. Hazen, Associate Professor of Botany in Barnard College; Philippe de La Rochelle, teacher of French in University Extension; Mary McClure, cataloguer in the Library; Ralph H. McKee, Professor of Chemical Engineering; Ralph F. Miller, Librarian of Columbia College; Harriet B. Prescott, Supervisor of the Cataloguing Department of the Library; Henry A. Ruger, Associate Professor of Education in Teachers College; and Mabel F. Weeks, Assistant to the Dean

of Barnard College in Charge of Social Affairs; on June 30, 1939, each with the title of Professor Emeritus, Dr. Charles A. Elsberg, Professor of Neurological Surgery; Evarts B. Greene, De Witt Clinton Professor of American History; Dr. Robert Lewis, Clinical Professor of Otolaryngology; Samuel McCune Lindsay, Professor of Social Legislation; Dr. J. Bentley Squier, Professor of Urology; Edwin C. Upton, Professor of English in Bard College; Dr. Herbert B. Wilcox, Professor of Pediatrics; on June 30, 1939, each with the title of Professor Emeritus in Residence, Charles P. Berkey, Newberry Professor of Geology; Marston T. Bogert, Professor of Organic Chemistry; Gary N. Calkins, Professor of Protozoölogy; Bergen Davis, Professor of Physics; Jefferson B. Fletcher, Professor of Comparative Literature; Joseph E. Harry, Professor of Greek in Bard College; George C. D. Odell, Brander Matthews Professor of Dramatic Literature; and Frederick J. E. Woodbridge, Johnsonian Professor of Philosophy.

The details of the visit made by Their Majesties, the King and Queen of Great Britain, to Columbia University on Saturday, June 10, 1939, were arranged by the Department of State at Washington pursuant to a request by Their Majesties that the visit be made. Their Majesties, attended by members of their staff as well as by the Governor of the State of New York and the Mayor of the City of New York, were met and conducted by the Chief Marshals, Provost Frank D. Fackenthal and Professor Harry Morgan Ayres, across South Court and into the Low Memorial Library. While crossing South Court, the President invited the attention of Their Majesties to the inscription on the Low Memorial Library, which greatly interested Their Majesties, who asked the President to send them in due time a copy of this inscription.

Their Majesties turned for a few moments into the Trustees' Room to view the portrait of King George II presented to the University by the Columbia University Club of London, as well as the cornerstone of the first College building erected in 1756. They expressed great interest also in the portraits of the early Presidents of King's College and of Columbia College, as well as in the chair of Benjamin Franklin and in the table of the Trustees, which is an exact duplicate of the historic table in the Admiralty at Whitehall about which Drake and Frobisher planned their naval expeditions some 350 years ago. Led by the Chief Marshals, Their

Majesties, together with the President and Mrs. Butler and the Chairman of the Trustees and Mrs. Coykendall, entered the rotunda and took their places on the platform.

The President then said:

With the gracious permission of Your Majesties, I have the honor to present to Your Majesties the Trustees of Columbia University in the City of New York; and then the members of the University Council; and then those members of the University here assembled, representing every Faculty, School and affiliated undertaking of the University's educational system, together with representatives of the administrative staff, academic and nonacademic, of the student body, and of the organized alumni; and also a chosen group of friends of the University; all assembled to do honor to Your Majesties on the occasion of this gracious visit to Morningside.

The President then read to Their Majesties the following formal address:

May It Please Your Majesties: The Trustees and Faculties of Columbia University, in the City of New York, successors to the Governors of the College of the Province of New York in the City of New York in America, created by virtue of the Charter granted by George II, by the Grace of God, of Great Britain, France and Ireland, King, Defender of the Faith, etc., under date of October 31, 1754,

Offer heartfelt greeting to Your Majesties on the occasion of their gracious visit to Morningside Heights.

This University, representing and reflecting as it does the best traditions and the highest ideals of the older and historic universities of Great Britain, of France, of Spain, of the Netherlands, of Belgium, of Germany, of Switzerland and of Italy, aims by the conservation, the advancement and the dissemination of knowledge to establish civilization on a constantly stronger foundation of sound principle and moral purpose which will some day have built upon it the superstructure of a prosperous and a peaceful world.

We hail the presence of Your Majesties on this American Continent and rejoice that it has been possible for Your Majesties, following a royal visit to the great Dominion of Canada, to come for a time to these United States and to see something of its people and of its capital cities of government and of economic and intellectual life.

May the coming years bring to Your Majesties and to those great peoples whose unity of spirit, of purpose and of political conviction Your Majesties so fully represent and typify, every blessing and every happiness.

Given in the City of New York this Tenth Day of June, 1939.

This address was signed by the President of the University, by the Chairman and Clerk of the Trustees, by the Treasurer of the University, by the Deans of the several Faculties, by the Provost and the Secretary of the University, by the Director of Buildings and Grounds, and by the Chairman of the Committee on Public Ceremonies.

Immediately following the reading of this address, the orchestra played "God Save the King." The President then said: "May I have the pleasure of showing to Your Majesties the original Charter of King's College of the Province of New York, issued in the reign of King George II, under date of October 31, 1754? This is one of the very few royal charters known to exist on this side of the Atlantic." Their Majesties then inspected the Charter and expressed their great interest in it. The President added: "May the University have the honor of Your Majesties' signatures in its Book of Visitors?" First the King and then the Queen signed the Book of Visitors, using two pens which had been specially procured for Their Majesties' use. Following this, the orchestra played "The Star-Spangled Banner."

Conducted by the Chief Marshals, Their Majesties, together with the President and Mrs. Butler and the Chairman of the Trustees and Mrs. Coykendall, then walked slowly out of the rotunda and across South Court and entered their automobile, to be driven to Hyde Park as guests of the President of the United States.

The distinction of the royal visit was added to by the dignity of the ceremony of reception, every detail of which was arranged by the Provost and the Secretary of the University and by the Chairman of the Committee on Public Ceremonies. The record of this gracious and kindly visit has now become part of the history of Columbia University and will never be forgotten.

It would be difficult to have more convincing evidence of the wide-spread and deep public interest in the fundamental problems which are stirring the present-day world than that which was provided by the outstanding success of the Congress on Education for Democracy held on Morningside in August last.

Congress on Education for Democracy held on Morningside in August last.

This Congress, which was the outgrowth of a suggestion made some time before by the Dean of Teachers College, while sponsored

primarily by Teachers College, enlisted the eager interest and support of

the entire University. The dates set for the sessions of the Congress, August 15-17, came not only in midsummer but at a time of excessive heat. Nevertheless, thousands of persons from all parts of the United States were drawn to Morningside to attend one or more sessions of this Congress or to participate in the seminars and discussions which were so important a part of its program. Despite the war clouds which were gathering over Europe and which compelled the withdrawal of his acceptance of an invitation to participate in the work of the Congress by M. Edouard Herriot, President of the French Chamber of Deputies and former head of the Government of his country, a distinguished group from Great Britain, from Scandinavia and from other lands made the journey to take part in these meetings. Earl Baldwin of Bewdley, former Prime Minister of the Government of Great Britain, Lord Eustace Percy, who, after a distinguished career in public office, is now Rector of the Newcastle Division of the University of Durham, Principal John Murray, of University College, Exeter, Ernest Bevin, of London, General Secretary of the Transport and General Workers Union, and Fred Clarke, Director of the Institute of Education of the University of London, were some of those who, despite the difficulty and embarrassment of being absent from their own home at such a time, were able to cross the ocean in order to participate in the work of the Congress and to contribute powerfully to its great success.

If it be asked, What did the Congress accomplish? the answer is that it started thousands of Americans toward more serious thought on the fundamental principles underlying our social, our economic and our political organization, and the dangers to which these are exposed, whether by open attack from without or by undermining from within. The sessions of the Congress were, in every sense of the word, catholic and open-minded. There was no attempt to put any limitation upon freedom of thought or freedom of speech. Indeed, there could not have been, because the Congress was held at a university.

The question is now asked, What is to be done next? Study and reflection have been stimulated and given direction, but to what form of action shall that study and reflection lead? Surely, the sound and helpful answer to that question is to be found by going back through the history

of the American people. The steps by which they settled these territories, the natural and orderly methods by which they set up efficient but simple local governments, the development of the political organization and activity of a State, and finally the creation of a Federal Government to bind these units together and to care for their genuinely common interests, record in relatively simple and easily understood form the story to which this twentieth-century world might well turn again for guidance and enlightenment. The strength of democracy is measured by the power of local self-government and by the strictness with which limitations set upon distant and central governments are enforced. That people which surrenders local self-government, either from indifference, from inertness or from a desire to live on someone else's earnings, is on the way out from the temple of democracy. The despot who has to seize control of a thousand or ten thousand local self-governments has an impossible job. The despot who can control a people by seizing a powerful central government may do so with a loud voice and passionate appeal and with the coöperation of a few hundred ambitious and power-seeking men. Thomas Jefferson understood all this and pressed it upon the attention of his fellow-Americans throughout all the years of his active life. The builders of the American Federal Government-Washington, Hamilton, Madison and the rest-understood it. The Federal Government which they called into being was never conceived as an instrument for the suppression of that local self-government upon which a true democracy must rest. If from the Congress on Education for Democracy there came some such conception of the democratic problem as this, then very real and very heartening progress was made in those hot summer days.

Together with the celebration of the fiftieth anniversary of the foundation of Barnard College and that of the fiftieth anniversary of the granting of the first charter to Teachers College, both of which were discussed in the President's Annual Reports for 1937 School of Mines and 1938,2 the University is now fortunately occupied with the celebration of the seventy-fifth anniversary of the organization of the old School of Mines. This School brought into existence, as the product

<sup>&</sup>lt;sup>1</sup> See pp. 36-39. <sup>2</sup> See pp. 18-20.

of a long period of distinguished usefulness, the School of Engineering of the present day. The story of this whole development was told in some detail in the President's Annual Report for 1938.<sup>3</sup>

The School of Mines represents once more the quick triumph of wise and persistent individual initiative and of individual influence. The School of Mines came into existence because a small group of men, headed by Professor Thomas Egleston, General Francis L. Vinton and Professor Charles F. Chandler, saw that such a school was needed and possessed the energy and the persuasive power to create it, in however humble a fashion. President Barnard, who was just beginning his epochmarking career as President of old Columbia College, was deeply interested in this undertaking and put the whole force of his personality and his position behind it. Almost in the twinkling of an eye this School of Mines was the center of the effort of a faculty of outstanding distinction and became at once the seat for the training of leading mining engineers throughout the United States. Until other schools of mines were developed years later, practically every important mining enterprise in the country was administered and guided by a graduate of the Columbia School of Mines. This was a truly great achievement and testifies to the wisdom of those who established and guided this great school. It was their hope and wish to make the School of Mines from the beginning a graduate school, but they quickly found that the colleges of that day were not giving the necessary instruction in mathematics, in physics and in chemistry to enable their graduates to pass at once to the study of engineering subjects. Therefore it became necessary for the Faculty of the School of Mines to lower its requirements for admission as originally planned, and itself teach the fundamental scientific subjects upon a knowledge of which mining engineering rested. The story of the development of all these tendencies and policies is recorded in the Reports of the Presidents of Columbia College and then of Columbia University from that day to this.

The time came when, other excellent schools of mining engineering having developed throughout the country, it became important, in the minds of the Faculty and alumni, that Columbia should train leaders and research workers, not only in mining but in the whole field of engineer-

<sup>8</sup> See pp. 15-18.

ing. So it was that in due time the present Faculty of Engineering came into existence, and, by the side of the School of Mines, departments of engineering of various types became centers of interest. This is the situation as it exists today at the end of the seventy-five-year period. The School of Mines as it was brought into existence three-quarters of a century ago still exists, but it exists, so to speak, as the grandparent of a family of engineering schools which are the product of its vitality and its vision.

The Trustees, the Faculty and the alumnae of Barnard College have been busily engaged during the year in paving the way for the celebration of the fiftieth anniversary of its foundation. The story of the Women at beginnings of Barnard College and of its development was Columbia told in the President's Annual Report for 1938.4 During the year a fortunate addition has been made to the material available for an understanding of the origin, development and activity of Barnard College. This is to be found in the volume entitled Barnard College: The First Fifty Years, by Alice Duer Miller and Susan Myers, which has just been published by the Columbia University Press. In these pages the story of the first half-century of Barnard College life is told with clearness, simplicity and great attractiveness. Those who read this volume will gain the material needed for an understanding and appreciation of what Barnard College has done and is aiming to do.

The position of women in the Columbia University educational system has long been so well established, and the opportunities open to them to gain either a liberal or a professional training or to have guidance in fields of advanced study and research, are so admirable and so complete that there remains little to add to the record which has been made. Since Barnard College was founded a half-century ago, women have been admitted on equal terms with men to every part of the University save the School of Engineering. As has often been pointed out, Columbia College is for men only, as Barnard College is for women only. In every other part of the University coeducation is accompanied by coinstruction.

The Report of the University Registrar for the year ending June 30, 1939, shows that the total enrollment of students in all parts of the University's educational system was 34,834, from which total must be deducted 2,594 for duplication due to the registration of students under

<sup>4</sup> See pp. 18-20.

more than one faculty. Of the resulting total of 32,240, being the registration of different individuals, the men numbered 13,877 and the women 18,363. Of the more than four thousand students whose applications for registration in that year could not be accepted, an overwhelming proportion were men. Apart from Barnard College, the women students are chiefly to be found in the Graduate Faculties, in the School of Nursing, in the School of Library Service, in Teachers College and in the Summer Session.

It will be of interest to record the list of those women who have received from Columbia University a degree honoris causâ in recognition of their service to letters, to science, to education or to public work. The list which follows shows that degrees honoris causâ have been conferred upon twenty-four women, and that University Medals have been conferred upon six. The University Medal, it should be said, represents and takes the place of the degree of Master of Arts, which has not been conferred honoris causâ since it became an established University degree to be taken in course. Therefore, at Columbia the University Medal is, to all intents and purposes, a degree honoris causâ.

#### HONORARY DEGREES

1887	Amelia Blandford Edwards	L.H.D.
•	Maria Mitchell	LL.D.
	Alice Freeman Palmer	L.H.D.
1909	Mary Whiton Calkins	Litt.D.
1910	Mariana Griswold Van Rensselaer	Litt.D.
1915	Louisa Lee Schuyler	LL.D.
1917	Anna Caroline Maxwell	A.M.
1921	Marie Curie	Sc.D.
1922	Mary Mills Patrick	Litt.D.
1927	Agnes Repplier	Litt.D.
1928	Willa Cather	Litt.D.
1929	Dorothy Canfield Fisher	Litt.D.
	Virginia Crocheron Gildersleeve	Litt.D.
	Meta Glass	Litt.D.
	Patty Smith Hill	Litt.D.
1930	The Duchess of Atholl	LL.D.
1931	Edna Ferber	Litt.D.
1932	Alice Pleasance Hargreaves	Litt.D.
1935	Helen Waddell	Litt.D.

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PRE	SI	D F.	NT	S	RE	PC	RT

25

1936	Ellen Fitz Pendleton	Litt.D.
,,,	Sarah Wambaugh	LL.D.
1937	Mary Emma Woolley	Litt.D.
1938	Dorothy Thompson	Litt.D.
1939	Evangeline Booth	LL.D.
,,,,	C	

#### UNIVERSITY MEDALS

1931	Mabel Smith Douglass
1933	Lucetta Daniell
	Alice Duer Miller
1935	Mabel Hyde Kittredge
1937	Helen Young
1020	Harriet Beardslee Presc

1939 Harriet Beardslee Prescott

This impressive list speaks for itself. The first three of these degrees were conferred on the strong recommendation of President Barnard at the time of the celebration of the one hundredth anniversary of the Act of the Legislature of the State of New York in separating Columbia College from the University of the State of New York, with which it had for three years previously been identified. No other degrees *honoris causâ* were conferred upon women until 1909. Since that time, these awards have been constant.

The conflict between highly specialized knowledge and the essentials of a liberal education goes on with vigor, and the end is not yet in sight. It may be suspected that this conflict is in considerable part due to the fact that an increasing number of college teachers have qualified themselves to receive the degree of Doctor of Philosophy from a university. These men are quite likely, when they

begin the work of college teaching, to reflect immediately the influence of their university training and to approach their teaching task in a spirit of research instead of in a spirit of instruction and interpretation. It is not at all essential that a college teacher should have reached the degree of Doctor of Philosophy in his university course of study. What is essential is that he should have a sound and scholarly comprehension of the subject matter of that which he is to teach, as well as skill and tact in its interpretation to younger and less developed minds. The high degree of specialization in study to which the doctor of philosophy has become accustomed is precisely that which is to be avoided in college teaching. There are

many thousands of college graduates in the United States, both men and women, who have learned a great deal of mathematics, of physics, of chemistry, of zoölogy and of other subjects, without in the least knowing anything of what has been the history of these branches or divisions of knowledge, of how they originated or of who advanced them by discovery or interpretation and gave them their place in the intellectual life of the Western world. The college student who is in search of a liberal education should be taught all of these things before he is introduced to the details of the subject matter of that field of knowledge which is being presented to him. The student of mathematics, for example, should be taught the history, the origin and the development of that vast subject, as well as the general relation of mathematics to the culture and to the practical life of civilized men. He should know the great names associated with mathematics, particularly in the period of its origin and early development. He should know who were Euclid, Archimedes, Hipparchus, Ptolemy, Boethius. He should know what each one of these great men did to promote the development of mathematics and what was the contribution of each to its content and its importance. Then, too, he should be taught where the names arithmetic, algebra, geometry, trigonometry and calculus came from; who were responsible for the first formulations of these divisions of mathematical knowledge; who in the Middle Ages and our modern times have been the outstanding mathematicians; what were their personalities, their contacts and their specific contributions to knowledge. Photographs of these great men should hang upon the walls of the classroom in which instruction in mathematics is given, so that the twentieth-century student may get some appreciation of the appearance of these men and of their personalities, as well as of their scientific influence. In other words, it is quite as important for the college student to know about mathematics as it is for him to know something of mathematics itself. Precisely the same is true of chemistry, of physics, of zoölogy, of psychology, of economics and of all the other fundamental subjects which are included in the usual college curriculum. To be overwhelmed with the details of knowledge in any one of these fields without first being given insight into what all those details of knowledge mean, is to build a barrier across the path of progress toward a liberal education which it is not easy to overcome.

College teaching should be something quite unique. It is different from that of the secondary school, for the pupil is older and more mature and his intellectual curiosity is increasingly manifest. On the other hand, it is quite different from university teaching, because in that field the liberal education which the college aims to give is taken for granted and serves as the foundation for the highly specialized study and training in research which it is the business of the university teacher to offer and to supervise. Confusion between the aim and the method of college teaching and the aim and the method of university teaching is fatal to the excellence of college life and work. It is a false ambition for a college to call itself a university or to wish to be known as a university. The college, in our American educational system, has a definite and vitally important place of its own. If it shall ever cease to occupy that place, the cause of liberal education is doomed until such time as the college finds it possible to regain the place which belongs to it.

In a modern democratic society the true university is responsible not only for the preservation and the advancement of knowledge, but for the constant illumination and instruction of public opinion.

It is to the university, and perhaps to the university alone, that public opinion can turn for dispassionate and Direct Education of Public Opinion

truly scholarly instruction and interpretation. As has been pointed out in previous Annual Reports, careful thought has been given to this aspect of the work of Columbia University from the very beginning of its organization. Lectures, addresses and demonstrations open to the general public, given not only by members of the University staff but by distinguished visitors, are each year numerous and highly important. The more systematic instruction offered by University Extension is greatly valued and has produced admirable results both within and without the University. The University Press, having become now one of the chief publishing undertakings in the United States, brings out each year scores of books which are of far more than ordinary importance.

The final purpose of each and all of these undertakings is one and the same. It is to relate the University's scholars and their scholarship directly to the public opinion not only of the American people but of the civilized world. The modern university in a democracy must be thought of as a true lighthouse which illumines the path of those who may travel in any

land. An outstanding tragedy of the years through which we are now living is the disappearance of the true university in countries where it has long been of most distinguished and well-recognized competence. That the hard hand of government should once again be able to invade the sacred field of liberty and to close the door to liberty's growth and influence is something which it is almost impossible to understand, the history of scholarship and of university influence being what it is. Just 200 years ago academic freedom made a successful fight for its life at the University of Jena. Were that fight to be renewed at that university today, it would not be successful, at least not for the moment. The fact must therefore be clearly recognized that if universities are to disappear, the loss will fall upon the whole people of the land in which the disappearance takes place, and not merely upon a relatively small company of scholars and students who constitute the university family at any given moment. The tragedy would be of national, and therefore of international, importance.

Dr. Arnold Duncan McNair, formerly Whewell Professor of International Law at the University of Cambridge, has, in his recently published

Public Law and Government book entitled *The Law of Treaties*,<sup>5</sup> paid a noteworthy and much appreciated tribute to the work which Columbia University has so long done in the field of public law

and government. He cites in particular the writings of Professor John Bassett Moore and those of Professor Charles Cheney Hyde as having been "the constant companions of international lawyers in the United Kingdom and on the continent of Europe for many years."

Particularly at this time, with the economic and political structure of the world shaken to its foundation, there can be no more imperative demand upon the University's scholarship than that it make unceasing and emphatic appeal to public opinion and to governments to respect the fundamental principles of public law and morals and to take counsel together for their steady strengthening and development.

The name of Francis Lieber heads the list of Columbia's scholars in this field. He was appointed Professor of History and Political Science in old Columbia College in 1857. His title was changed in 1865 to that of Professor of Constitutional History and Public Law. Until his death in 1872 he never ceased to sound the note of constructive leadership in this field

<sup>&</sup>lt;sup>5</sup> Arnold Duncan McNair, *The Law of Treaties: British Practice and Opinions*. New York: Columbia University Press, 1938. 578 pp.

of thought. Not only in the United States but in Europe Professor Lieber was turned to and quoted, constantly and confidently, because of his learning and his insight. The records of Columbia College show that Professor Lieber used as books of reference for his students Say's Political Economy, Weber's Universal History, his own work on Civil Liberty and Woolsey's International Law. It is interesting to note that seventy-five years ago Lieber's position was already so outstanding that Professor Woolsey dedicated to him the edition of this book which was published in 1864 "as a token of respect for his services in the field of political science." Lieber's career, which has recently been described in most interesting fashion in two articles published in the Columbia University Quarterly for September, 1938 and December, 1938, respectively, was one which probably could not have taken place at any other time in the world's history or in any other country than the United States. It was the newness of the United States, together with the unsettled condition of Europe, that offered Lieber the opportunity which he so admirably embraced. In his inaugural address, delivered on February 17, 1858, when he was just beginning his work in old Columbia College, he used this language:

Then came the Scotch professor who dared to teach, in his dingy lectureroom at Edinburgh, contrary to the opinion of the whole world, that every
man, even were it but for personal reasons, is interested in the prosperity of his
neighbors; that his wealth, if it be the result of production and exchange, is
not a withdrawal of money from others, and that as with single men so with
entire nations—the more prosperous the one so much the better for the other.
And his teaching, like that of another professor before him—the immortal
Grotius—went forth, and rose above men and nations, and statesmen and
kings; it ruled their councils and led the history of our race into new channels;
it bade men adopt the angels' greeting: "Peace on earth and good will toward
men," as a maxim of high statesmanship and political shrewdness. Thus rules
the mind; thus sways science. There is now no intercourse between civilized
nations which is not tinctured by Smith and Grotius."

After examining various approaches to the study of political science, he wrote these impressive words:

Now the student will be prepared to enter upon that branch which is the glory of our race in modern history, and possibly the greatest achievement of combined judgment and justice, acting under the genial light of culture and

<sup>&</sup>lt;sup>6</sup> Francis Lieber, Miscellaneous Writings. Philadelphia: J. B. Lippincott & Co., 1881, Vol. I, p. 349.

religion—on International Law, that law which, without the sword of justice, encompasses even the ocean.

It is of record that Lieber's Instructions for the Government of the Armies of the United States in the Field, generally known as General Orders Number 100, prepared on the invitation of President Lincoln, formed the first codification of international articles of war. No less an authority than Professor Bluntschli of Heidelberg has written that it was this document by Professor Lieber which prompted Bluntschli himself to draw up, after the model provided by Lieber, first, the laws of war and then, in general, the law of nations in the form of a code or law book which should express the present state of the legal consciousness of civilized peoples. Lieber took large part in laying the foundations for the Institut de Droit International which was organized shortly after his death.

It was Lieber, then, who, from his chair in old Columbia College, in so large part laid the foundations for that development of international law and practice which has grown so rapidly throughout the world during the past two generations. It is to the fruit of his work that nations must increasingly turn if they are really bent upon securing for themselves prosperity and peace.

Following Lieber came the important and stimulating work in this field by Professor John W. Burgess and then that of the first Hamilton Fish Professor of International Law and Diplomacy, John Bassett Moore. Professor Moore's work is literally as colossal in amount as it is outstanding in importance. There is no part of the field of international law and diplomacy to which he has not made constructive contribution. When Professor Moore retired as Hamilton Fish Professor in 1924, his successor, Dr. Charles Cheney Hyde, undertook to continue this task to the great satisfaction both of the University and of scholars in the field of international law and diplomacy. The Department of State has leaned heavily upon the writings of Professors Moore and Hyde, and the University has through them made one of its most important and constructive contributions to the public policy of the world during the last generation.

From this brief review, it is evident that the traditions at Columbia in

<sup>7</sup> Ibid., p. 367.

the field of international law and policy are rich in performance. Those who contributed so powerfully to those traditions reflect in their own academic history the conditions of the world in which they lived. Lieber had to leave Germany to seek intellectual freedom on this side of the Atlantic. He confidently believed that the teachings of Adam Smith and of Grotius were worthy to be followed and would be followed. His codification of the laws of war and Bluntschli's indebtedness to him fixed his place in the history of the intellectual life of the nineteenth century.

Is it not significant, too, that the important volume by him who was formerly Whewell Professor of International Law at the University of Cambridge comes at a time when there are powerful governments in the world which look upon treaties as scraps of paper and upon international law as an idle dream? The tradition and the history of Columbia teach precisely the opposite.

The budget of the University corporation for the year ending June 30, 1939, as adopted by the Trustees on April 4, 1938, together with such amendments as were made prior to June 30, 1938, showed an estimated deficit in the general income of the corporation for the year 1938–39 of \$1,104,546.13. Later amendments increased

this estimated deficiency to \$1,168,338.60. In addition, there was reappropriation of unexpended balances chargeable to general income amounting to \$24,520.65. Adding these reappropriated balances to the estimated deficit as contained in the amended budget raised the final estimate of the year's deficit to \$1,192,859.25. This very discouraging outlook was, fortunately, greatly improved by reason of the year's operations, which reduced the actual deficit for the year to \$363,052.31.

This improvement in the financial operations of the year 1938–39 was due to a very satisfactory increase in income of \$453,611.93. To this was added the savings in budget appropriations, amounting to \$376,195.01. Had the University been able to collect its entire earned income for the year 1938–39, the budget for that year would have been in balance after providing \$305,000 for the amortization of the Loan of 1936 and \$170,648.72 for interest on corporate indebtedness.

The budget for the year 1936–37 was substantially in balance. The prolongation of the economic depression, the decrease in the rate of interest on permanent investments and the postponement of a portion of the

University's expected earned income united to produce a final deficit of \$426,172.82 for the year 1937–38, as well as one of \$363,052.31 for the year 1938–39.

Of course, the University must work under a balanced budget. The very striking savings in the budget appropriations which have been made each year for some time past are due to skillful administration by the University's various administrative officers and heads of departments. It is plain, however, that such stringent economies cannot be continued indefinitely without affecting the work of the University most severely. It is, therefore, once more made plain that there is imperative need of a greatly increased endowment which will provide an income sufficient to care for the work of the University as at present organized, even without any permanent addition to equipment or any expansion into new fields of activity.

The foregoing figures are those concerning the budget of the University corporation alone. The financial administration of the other corporations included in the University's educational system, namely, Barnard College, Teachers College, Bard College, the College of Pharmacy and the New York Post-Graduate Medical School, are quite independent. These several corporations have their own financial problems to solve and their own corporate needs to meet, wholly apart from those of the University.

The Treasurer's Report, which sets out in detail a statement of the financial operations of the year 1938–39, should have most careful study by members and friends of the University. That Report will answer any question which may be asked as to the details of the University's income and expenditures and as to the condition of the University's general and special funds.

Throughout the economic depression, it has been customary in each Annual Report to make a comparison between the budget appropriations for the year under review and those for the year 1931–32, when those appropriations were at their maximum. An examination of these figures will make plain how serious has been the effect of the economic depression upon the University's resources available for carrying on its most important and always growing work in the fields of scholarship and public service.

### TOTAL BUDGET APPROPRIATIONS

Including amendments made subsequent to the adoption of the budget, but excluding reappropriated balances

Schedule A	1931-32	<b>19</b> 38–39
General University administration and		
instruction	\$ 5,936,619.36	\$ 5,117,598.72
Summer Session	251,050.00	207,500.00
University Extension	1,758,050.00	639,900.00
Medical School	1,231,387. <b>2</b> 0	1,575,112.87
School of Dental and Oral Surgery .	418,100.00	294,300.00
Retiring and widows' allowances	185,425.99	244,848.29
Payment to Teachers Insurance and		
Annuity Association	111,500.00	158,850.00
Fellowships, scholarships and prizes .	382,597.98	477,713.00
Grant to Bard College		30,000.00
	\$10,274,730.53	\$ 8,745,822.88
Schedule B—Buildings and Grounds .	\$ 1,157,040.00	\$ 917,224.00
Schedule C—Library	434,108.93	495,169.61
Schedule D—Business administration	222,740.00	232,400.47
Schedule E—Annuities	54,457.70	48,590.86
Schedule F—Insurance	50,000.00	42,700.00
Schedule G—Interest account	495,283.89	202,686.54
Amortization	230,000.00	305,000.00
Schedule J—Under the direction of		
the President	365,000.00	210,000.00
Total	\$13,283,361.05	\$11,199,594.36
Amounts chargeable to general income.	\$ 9,983,310.13	\$ 7,980,325.10
Amounts otherwise chargeable	3,300,050.92	3,219,269.26
Total	\$13,283,361.05	\$11,199,594.36

The appropriations as contained in the budget adopted by the Trustees on April 3, 1939, for the work of this corporation alone during the academic year 1939–40, together with such amendments as were made previous to June 30, 1939, are as follows:

For educational administration and instruction For care of buildings and grounds	\$ 7,889,176.41 916,952.00 494,886.51
For business administration	224,013.00 66,502.84
For insurance on academic property	42,700.00 160,405.54
For amortization of the Loan of 1936	340,593.04 430,097.35
For fellowships, scholarships and prizes	476,373.98 <b>222</b> ,000.00
Grant to Bard College	29,000.00
Making in all the sum of	\$11,292,700.67
To the income of the corporation	\$ 7,996,120.97
To income from special endowments  To gifts	1,007,174.34 298,201.68
To moneys to be paid by the Carnegie Foundation To moneys to be paid by the Presbyterian and Babies'	162,060.00
Hospitals and by the Neurological Institute	390,913.00
To moneys to be paid by Teachers College	459,081.64 868,675.00
To moneys to be paid by Bard College	42,090.00
School	68,384.04

\$11,292,700.67

In connection with the foregoing tables, it should be pointed out that the provision, amounting for 1939–40 to \$885,364.28, for Dining Halls, Residence Halls, King's Crown activities and intercollegiate athletics, in former years appearing in the regular budget, has now been transferred to a supplementary budget and only the net cost to the University is carried in the regular schedules.

In accordance with custom, there is presented the following summary statement of the results of the operation of the work of the University corporation, so far as Income and Expense Account is concerned, since the present system of accounting was adopted:

Year	Surplus	Deficit	Capital Account: General Funds
1912-13		\$67,769.12	
1913-14		42,952.64	
1914-15		13,592.55	\$25,488,672.81
1915-16		40,855.14	26,996,740.07
1916-17	\$30,547.37		27,044,870.90
1917-18		211,106.17ª	26,933,764.13
1918–19	82,214.74		26,400,649.91
1919-20	71,590.93		25,545,110.85
1920-21	89,571.82		25,635,421.05
1921-22	156,630.54		26,430,836.76
1922-23	98,786.81	******	26,497,602.41
1923-24	54,982.74	***************************************	27,301,358.85
1924-25		122,909.21	27,371,312.10
1925-26	157,205.79		27,469,649.06
1926-27		142,229.76	29,236,825.38
1927-28		168,462.99	33,859,764.34
1928-29		467,777.98	36,385,380.16
1929-30		344,443.75	38,096,899.20
1930-31	170,290.20	***************************************	38,319,089.20
1931-32		293,957.41	37,675,714.86
1932-33		298,910.66	38,547,232.48
1933-34		193,060.90	36,181,228.46
1934-35		193,077.27	35,976,793.56
1935–36		152,321.42	35,352,751.23
1936–37		7,909.42	35,312,448.37
1937-38		426,172.82	34,954,813.36
1938-39		363,052.31	34,520,592.96
	\$911,820.94	3,550,561.52	

<sup>\*</sup> This deficit was almost met, however, by the work of the Alumni Fund Committee in raising \$199,218.36 to be applied toward meeting it.

The gifts and bequests received during the year are set out in detail on pages 198–209 of the Treasurer's Report. As is there shown, the total amount received in gifts by the University Corporation alone amounted to \$1,392,279. 72, divided as follows:

## A. Gifts to Capital:

1. General endowment				\$177,906.76
2. Special endowments				514,557.13
3. Buildings and grounds				41,380.00

\$733,843.89

## B. Gifts to Income:

1. General purposes				\$ 24,047.80
2. Specific purposes				634,388.03

658,435.83

\$1,392,279.72

The gifts to the University corporation continue to be numerous and most helpful. In large measure these gifts are to enable the University to carry on some particular work of present importance. What the University greatly needs is unrestricted gifts to be added to the general income of the corporation, or principal gifts whose income may be similarly used. The University cannot be at ease in the presence of its task until this problem of an increased income for general University purposes is solved.

The chief additions to general and special endowments and to buildings and grounds were the following:

From the Estate of Benjamin N. Cardozo, for the Cardozo (Benjamin N.) Fund for a chair in jurisprudence in the Law School, \$183,968.89;

From the Estate of Mary B. Pell, for the Pell (Mary B.) Fund, \$173,574.90; From the Estate of William Campbell, for the Campbell (William) Fellowship Fund, \$171,456.60;

From the Estate of Mary Purroy Mitchel, to establish the Mitchel (John Purroy) Memorial Fund, \$53,968.05;

From the Carnegie Corporation, for the Carnegie Corporation Fund for Graduate Medical Instruction and Research, \$50,000;

From the Commonwealth Fund, toward the cost of construction and equipment of the laboratory building at the Medical Center for graduate work in

medicine, \$40,000;

From the Alumni Fund Committee, for special endowments, \$34,725.20, including the bequests of Robert M. Raymond for religious and social work and for the University Medical Office amounting to \$20,517.82, which his will stipulated should be considered as a contribution through the Alumni Fund;

From an anonymous donor, for the James T. Horn Scholarships in Colum-

bia College and in the School of Engineering, \$7,500;

From the Estate of Charles H. Rathbone, for general endowments, \$4,000; From the Class of 1913, for the Class of 1913 Scholarship Fund, \$3,000.

Among the numerous gifts to be added to the University's income for general and for special purposes were the following:

From the Rockefeller Foundation, for various forms of research work, \$171,952.77;

From the John and Mary R. Markle Foundation, for various forms of re-

search work, \$40,550;
From the Carnegie Corporation, for the support of research and other forms

of University work, \$38,887.50;
From the Josiah Macy, Jr., Foundation, for various research purposes,

\$32,522.50;

From the General Education Board, for the support of the work in normal child development study, \$32,000;

From an anonymous donor, for cancer research, \$20,000;

From the Commonwealth Fund, for various research purposes, \$16,250; From the Alumni Fund Committee, for general purposes, \$10,047.80; for specific purposes, \$5,689.50;

From the W. K. Kellogg Foundation, for special research in the Depart-

ment of Medicine, \$15,000;

From an anonymous donor, for research work in the Department of Dermatology, \$13,180;

From an anonymous donor, for scholarships in the Medical School, \$12,000; From the William J. Matheson Foundation, for research work in the Department of Neurology, \$11,534,90;

From Research Corporation, for the advancement and extension of research and experimentation, \$5,250; for awards to distinguished scientists, \$5,000;

From Dr. Godfrey L. Cabot, for the Maria Moors Cabot Prizes in Journalism, \$10,000;

From the Montgomery Corporation, for general purposes, \$9,000; for cancer research, \$1,000;

From the United States Public Health Service, for the American Journal of Cancer, \$8,500;

From the John B. Pierce Foundation, for research in air bacteriology, De Lamar Institute of Public Health, \$8,325;

From the American Council of Learned Societies, for fellowships, \$3,200; for assistance in the cataloguing of the Chinese and Japanese collections in the Library, \$5,000;

From an anonymous donor, for research in the School of Business, \$7,000; From the National Tuberculosis Association, for various forms of research work, \$5,530.17;

From the Anna Fuller Fund, for cancer research and for the American Journal of Cancer, \$5,500;

From F. Trubee Davison, for special research at the Medical School, \$5,045.42;

From Mrs. Thomas J. Watson, for general purposes, \$5,000;

From the Brain Research Foundation, for the support of the work of the Department of Neurology, \$5,000;

From the Florida Citrus Commission, for special research, \$5,000;

From William R. Warner & Company, Inc., for special research at the Medical School, \$5,000;

From the Columbia University Club, for the Columbia University Club Scholarships, \$4,500;

From Mrs. John Dwight Leggett, Jr., for cancer research in the Department of Surgery, \$4,050;

From Mrs. Kenneth W. Watters, Jr., for cancer research in the Department of Surgery, \$4,050;

From Teachers College, for research in the social sciences, \$4,000;

From the National Committee on Maternal Health, for research purposes at the Medical School, \$3,550;

From the Texas Company, for research work on thin-film lubrication, School of Engineering, \$3,500;

From an anonymous donor, for research in the Department of Surgery, \$3,500;

From the Engineering Foundation, for barodynamic research, \$3,375;

From the Chemical Foundation, for various forms of research work, \$3,300; From the Committee of Citizens of Holland, for the Queen Wilhelmina Professorship, \$3,250;

From Grade A Milk Association, for special research in infant feeding by the De Lamar Institute of Public Health, \$3,000;

From the Jovan Laboratories, Inc., for special research in the Department of Bacteriology, \$3,000;

From the National Lead Company, for a fellowship in the Department of Chemical Engineering, \$3,000.

The total gifts in money received during the year by the six corporations included in the educational system of the University are classified as follows:

Purpose	Columbia University	Barnard College	Teachers College	College of Pharmacy	Bard College	New York Post- Graduate Medical School	Total
A. Gifts to Capital							
1. General en- dowment . 2. Special endow-	\$177,906.76	\$6,290.00	\$10,000.00	\$3,100.90			\$197,297.66
ments 3. Buildings and	514,557.13	181,728.24	737.46				697,022.83
Grounds	41,380.00	1,655.59	6,250.00				49,285.59
B. Gifts to Income							
1. General pur- poses 2. Specific pur-	24,047.80	2,425.00		11,280.00	\$59,925.39	\$86,771.72°	184,449.91
poses	634,388.03	40,193.37ª	178,096.52b	100.00		9,530.96°	862,308.88
	\$1,392,279.72	\$232,292.20	\$195,083.98	\$14,480.90	\$59,925.39	\$96,302.68	\$1,990,364.87

<sup>\*</sup> Including \$112.50 for loan funds.
b Including \$152 for loan funds.
c Including Hospital.

The following statement, which is presented annually, records the gifts in money alone made since 1890 to the several corporations included in the University:

1890-1901														\$5,459,902.82
1901-2 .										·	Ċ	Ċ	\$1,082,581.02	₩5,459,902.02
1902-3 .											Ċ	·	1,721,895.06	
1903-4 .													1,783,138.18	
1904-5 .												·	1,960,247.87	
1905-6 .									Ċ				1,299,909.78	
1906-7 .									Ċ	Ċ	•	•	1,360,590.80	
1907-8 .												٠	1,077,933.87	
1908-9 .											·	•	974,637.07	
1909-10 .									-	•	•	•	<b>2,</b> 357,979.30	
1910-11 .							·		•	•	•	•	2,932,655.79	16,551,568.74
							·	·	·	·	•	•	21932,033.79	10,551,500.74
1911-12 .													\$2,242,417.58	
1912-13 .													1,605,935.33	
1913-14 .													1,494,648.61	
1914-15 .													814,111.69	
1915–16 .													2,287,144.91	
1916-17 .													1,634,578.78	
1917–18 .													882,267.76	
1918–19 .													3,455,356.60	
1919-20 .													3,724,181.14	
1920-21 .													2,190,289.85	20,330,932.25
														755 7757
1921-22 .		•											\$3,270,380.76	
1922-23 .				٠									12,728,021.59	
1923-24 .													2,375,691.92	
1924-25 .													2,097,108.25	
1925–26 .													5,276,777.11	
1926-27 .													3,498,380.20	
1927-28													5,546,667.61	
1928-29 .													3,617,928.92	
1929-30 .													4,242,991.66	
1930-31 .	•	•	٠	٠	•	٠	٠	٠				٠	4,139,980.62	46,793,928.64
1931-32 .													\$2,873,182.99	
1932-33 .													2,317,453.66	
1933-34 .											Ċ		2,640,118.53	
1934-35 .									Ċ		Ċ	•	2,165,333.02	
1935-36 .													6,608,131.87	
1936-37 .									·		Ċ		2,772,218.91	
1937-38 .													2,504,205.40	
1938-39 .													1,990,364.87	23,871,009.25
										•	-	•	-,,,,,,,,,,,,,,	23,0/1,009.25
m . 1														

\$113,007,341.70

In the following financial statement given each year, the land, buildings and equipment used for educational purposes by Columbia University are entered at cost, the Upper and Lower Estates at their assessed Property and valuations, and all other University property at book values. Endowment

	Capital Resources June 30, 1939	Appropriations 1938–39	Income and Expense Account 1938-39
Columbia University	9,487,178.96 20,567,062.86	\$11,199,594.36 <sup>a</sup> 497,630.20 <sup>b</sup> 2,695,571.15 <sup>c</sup> 122,217.52 212,135.00 <sup>d</sup> 64,117.86 <sup>e</sup>	- \$363,052.31 - 68,143.41 - 207,680.98 - 31,686.20 2,960.27 <sup>t</sup> - 11,073.21 <sup>g</sup>
	\$158,314,167.33	\$14,791,266.09	
Other affiliated institutions:  Union Theological Seminary Presbyterian Hospital Babies Hospital Neurological Institute	\$13,189,729.68 47,996,666.29 <sup>h</sup> 4,730,381.98 <sup>h</sup> 2,226,072.84 <sup>h</sup> \$68,142,850.79		

With amendments to June 30, 1939.
 Not including \$466,779.36 contained in Columbia University budget.
 Not including \$868,895 contained in Columbia University budget.
 Not including \$49,160 contained in Columbia University budget.
 Not including \$64,958.56 contained in Columbia University budget.

After giving effect to grant of \$30,000 from Columbia University.

g Including Hospital.

h As of December 31, 1938.

The following officers of the University have died since the publication of the last Annual Report:

Deaths of University Officers On November 22, 1938, Stephen G. Williams, LL.B., Ph.D., Trustee of the University and of Bard College, in the seventy-ninth year of his age.

On December 4, 1938, the Rev. Cornelius C. Clifford, S.T.D., Litt.D., Lecturer in Philosophy, in the eightieth year of his age.

On December 10, 1938, De Forest Stull, A.M., Associate in Teaching of Social Science in Teachers College, in the fifty-fourth year of his age.

On December 23, 1938, John E. Wertz, B.S., Assistant in Chemistry, in the twenty-fifth year of his age.

On January 23, 1939, Leopold Jaches, M.D., Clinical Professor of Radiology, in the sixty-sixth year of his age.

On February 14, 1939, Clarke F. Ansley, A.B., Litt.D., Editor of the Columbia University Press, in the seventieth year of his age.

On February 19, 1939, Arthur Ware, B.S., Lecturer in Household Arts and Science in Teachers College, in the sixty-third year of his age.

On March 1, 1939, Ambrose D. Henry, A.B., Trustee of the University, in the seventy-sixth year of his age.

On March 3, 1939, Edmund B. Wilson, Sc.D., LL.D., Da Costa Professor Emeritus of Zoology in Residence, in the eighty-third year of his age.

On May 10, 1939, Harold W. Wright, A.B., Instructor in the Education of the Handicapped in Teachers College, in the thirty-seventh year of his age.

On May 23, 1939, Edward C. Webster, M.S., Instructor in Anatomy, in the thirty-seventh year of his age.

On June 14, 1939, Ralph Pulitzer, A.B., a member of the Advisory Board of the School of Journalism, in the sixty-first year of his age.

On July 14, 1939, Frederick P. Gay, M.D., Sc.D., Professor of Bacteriology, in the sixty-fifth year of his age.

On July 18, 1939, Edwin R. A. Seligman, LL.B., Ph.D., LL.D., McVickar Professor Emeritus of Political Economy, in the seventy-ninth year of his age.

On August 19, 1939, Milton A. Bridges, M.D., Assistant Clinical Professor of Medicine in the New York Post-Graduate Medical School, in the forty-sixth year of his age.

On September 9, 1939, Harold Mestre, Ph.D., Dean of Bard College, in the fifty-sixth year of his age.

The world of today is overcrowded with information. The astonishing excellence of contemporary journalism and the rapidly growing service of the radio leave few happenings, whether important or Beneath the unimportant, that are not brought to the attention of the Surface whole world. Information, however, is not knowledge.

Knowledge involves and implies an understanding of what information means, of how much of this information has lasting significance and of how its particulars are to be welded together to make possible a true comprehension of what this vast amount of information really signifies. The one instrument which makes possible the turning of information into knowledge is the philosophy of history. Indeed, the philosophy of history is the common denominator of every numerator which enters into the intellectual life or the educational process. It is only through and by the philosophy of history that the story of humanity may be told and understood. It is, therefore, the one wholly essential subject of lifelong study on the part of intelligent human beings. The world has had for more than a century and a half an example of what the philosophy of history means and what the philosophy of history may teach. That example is provided by Edward Gibbon's History of the Decline and Fall of the Roman Empire, than which perhaps no greater book has ever been written. On its pages is told the story of the greatest of world political organizations at the height of its significance and power. Then there follows on those same pages that superbly told story of how that great empire came to its end and was laid in ashes.

All change in the history of civilization has taken place in one of two ways. Usually it has taken place slowly and gradually through the process of evolution. New and sometimes invisible forces are at work, now here and now there, shaping and reshaping men's mode of thought, changing their relation to environment and leading or guiding them to a change or reorganization of their social, economic and political institutions. Or these changes may take place, as they have done more than once, by the violent process of revolution. In such case, what the student of the philosophy of history sees is the storing up behind some barrier of a new and powerful force, usually emotional in character and in expression, which suddenly and with terrifying accompaniments breaks down the barriers which hold it in check and destroys in a few short years all that has been

accomplished through centuries and starts mankind on a new and wholly different path. If American independence was gained by evolution extending over some two hundred years in the history of the English people, the French Revolution was truly revolutionary both in form and in its results, including the years of Napoleonic domination.

What sort of change is it through which the world is passing today? Is the force behind that change evolution or revolution? No more vitally important question is to be pressed at this moment upon the attention not only of university scholars and their students, but upon the public opinion of the world. Fortunately, there have been published in recent years four outstanding contributions to the philosophy of history, and to them one may turn for most helpful guidance in trying to reach an understanding of what is really going on in this twentieth-century world. One of these works is from England, one is from Italy, one is from Spain and one is from Germany.

The English work is A History of Europe, by Herbert A. L. Fisher, the distinguished Warden of New College, Oxford.<sup>8</sup> This work is already recognized as a classic and will take its place by the side of Gibbon's History of the Decline and Fall of the Roman Empire. The third volume of the original edition of this work is entitled History of the Liberal Movement, and the last chapter of that volume is called "The Old Democracies and the New Dictators." Here is the point at which to begin to read this truly great work at the present time.

The second book is by the distinguished Italian philosopher and political scientist, Signor Gaetano Mosca, and is entitled *The Ruling Class*. This work, which is now some thirty years old, has been known to scholars in Italy and in France for a generation, but only during the past year has it appeared in English translation, with a most illuminating introduction by Professor Arthur Livingston of the Department of Romance Languages. Signor Mosca has drawn a most convincing picture of the way in which, through times that are past, different groups, tendencies, interests and ambitions have succeeded each other in the exercise of power over their fellow-men and over economic and political institutions.

<sup>&</sup>lt;sup>8</sup> Herbert A. L. Fisher, A History of Europe. London: Eyre & Spottiswoode, 1935. 3 vols. This work is now available in one volume.

<sup>9</sup> Gaetano Mosca, The Ruling Class. New York: McGraw-Hill Book Co., 1939.

The third book is by the Spanish scholar, Señor Ortega y Gasset, and is called *The Revolt of the Masses*. Ortega y Gasset offers another, and in a sense parallel, analysis of the forces which in time past have marked the rise and fall of change in Western civilization.

Finally, the fourth book is the much-discussed *Decline of the West*, by the German, Oswald Spengler." Spengler's book was written before the outbreak of the Great War of 1914–18 and was first published in Germany just as that war was coming to its end. It was received in countries other than Germany with interest tempered by sarcasm. As the years have passed, the interest has tended to increase and the sarcasm has shown signs of diminishing. Whatever may be thought of Spengler's argument, his book must be read, and read in connection with the works of Fisher, Mosca and Ortega, if one is to approach the underlying problems of today with open mind and willingness to face the distasteful. Such democracies as are left in the world are finding their obligations to their fellow-men increased in geometrical progression as the democracies themselves diminish in number or become subject to disintegrating forces within their own boundaries.

The first and most convincing lesson which the twentieth-century student of the philosophy of history will learn is that the world of today is essentially a unit, and that continents, national boundaries, languages and alleged differences of race as obstacles to human coöperation toward the highest human ends are all terms which belong to centuries now past. Any and every force set loose in the world exerts influence over the whole world. The political and economic isolation which is still taught by the intellectually halt, maimed and blind has, and can have, no existence under present-day conditions. The task before the world of today is to gain what information can be had from every possible source and then to go beneath that information to those wellsprings of knowledge and of understanding which will enable us to know what that information really means and reveals.

NICHOLAS MURRAY BUTLER,

President

November 6, 1939

Ortega y Gasset, The Revolt of the Masses. New York: W. W. Norton & Co., 1932.
Dowald Spengler, The Decline of the West. New York: Alfred A. Knopf, 1934.

# TABULAR STATEMENTS

#### TEACHING STAFF

T. Line St. A	Columbia	Barnard	Teachers	College of	Bard	New York Post- Graduate	Totalse		
Teaching Staff	Universitya	College	Collegeb	Pharmacy	College	Medical School	1937-38	1938-39	
Professors (including Clinical Professors) Associate Professors (including Associ-	421	23	83	5	9	29	415	421	
ate Clinical Pro- fessors) Assistant Professors (including Assist- ant Clinical Pro-	219	15	37	4	2	38	228	219	
fessors)	340	19	35	4	3	49	371	340	
Associatés	202	3	62	3	12	9	378	279	
Instructors	401	26	88	6	9	14	557	504	
Lecturers	110	24	38	4			170	152	
Curators	6	1	ı	.:			6	7	
Assistants	277	12	94	4		3	398	375	
Total	1,976	123	438	30	35	142	2,523	2,297	
University Extension not included above Summer Session not included above.	428 441						518 463	428 441	
	''					}	[1938]	[1939]	
Total	2,845	123	438	30	35	142	3,504	3,166	
Administrative officers not included above	78	10	20	3	10	2	90	94	
Emeritus and retired	81	6	28	2	0	8	88	90	
omeers	01								
Total	3,004	139	486	35	45	152	3,682	3,350	
Non-academic staff	2,006	227	517	12	29	9	2,796	2,800	

a Including officers of affiliated institutions whose appointments are made by the Trustees of Columbia University.
 b Excluding Horace Mann and Lincoln Schools.
 c Excluding duplicates.

THE SITE

	Square Feet	Acres
	Sq. mar. e 1 e e i	
A. 1. At Morningside Heights		-69-
Green and Upper Quadrangle	734,183	16.85
South Quadrangle	359,341	8.25
East Quadrangle	90,825	2.08
419–421 West 117th Street	3,618	.082
Deutsches Haus	1,809	.041
Maison Française	1,809	.041
Casa Italiana	4,036	.092
Casa de las Españas	1,809	.041
429 West 117th Street	1,809	.041
Residence of the Dean of Columbia College Residence of the Dean of the Faculty of Engineer-	1,809	.041
ing	1,809	.041
Residence of the Chaplain	1,809	.041
Claremont Avenue property	29,000	.679
	1,233,666	28.320
2. At the Medical Center		
[Broadway and West 168th Street]		
Total site, 891,185 sq. ft., 20.458 acres. Under		1
ownership of Columbia University	471,158	10.816
3. At Baker Field	1,221,385	28.039
[Broadway and West 218th Street]		
Total for Item A	2,926,209	67.175
B. Barnard College	209,832	4.814
Riverside Quadrangle	32,366	.743
Barnard College Camp	733,550	16.84
Durmand Contego Camp	<del></del>	
Total for Item B	975,748	22.397
C. Teachers College		
1. At West 120th Street	156,420	3.591
2. At 509 West 121st Street	17,035	.391
3. At 512, 514 West 122d Street and vacant lots	16,535	.380
4. Lincoln School	47,500	1.090
5. At 106 Morningside Drive	17,668	.406
6. At Van Cortlandt Park	619,600	14.224
7. At Speyer School	4,917	.113
[514 West 126th Street]		
8. Residence of the Dean	1,809	.041
Total for Item C	881,484	20.236
D. College of Pharmacy	7,516	.172
[115 West 68th Street]	25 105 669	-9
E. Camp Columbia, Lakeside, Conn	25,495,668	585.3
F. Bard College	1,967,823	45.175
G. New York Post-Graduate Medical School	56,292	1.291
H. Nevis, Irvington-on-Hudson	2,957,514	67.895
Total	35,268,254	809.641

## DEGREES CONFERRED

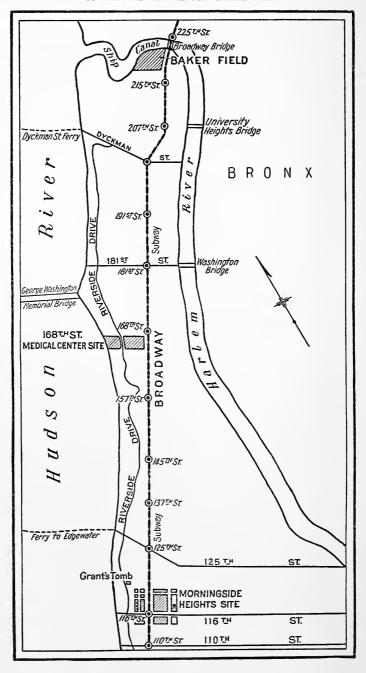
During the academic year 1938–39, 5,051 degrees and 154 diplomas and certificates were conferred, as follows:

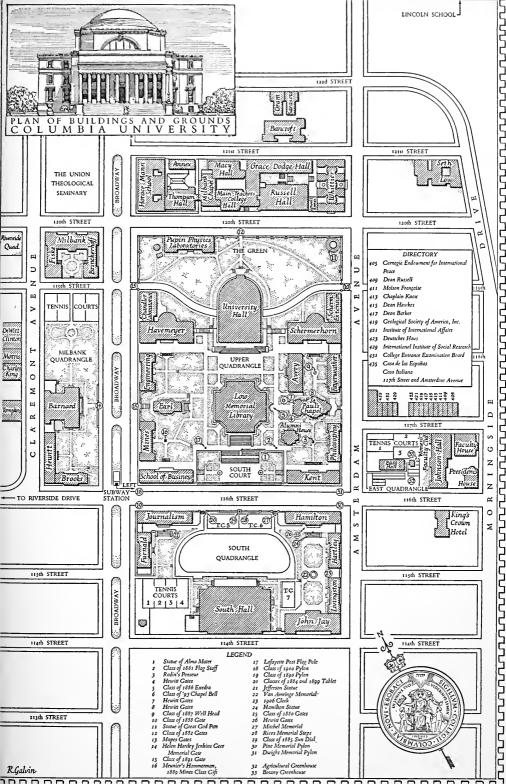
COLUMBIA COLLEGE Bachelor of Arts	351	dontics	7
Barnard College		surgery	3
Bachelor of Arts	216	University Council Bachelor of Science (general	
FACULTY OF LAW		studies)	57
Bachelor of Laws	117 10	Bachelor of Science (optometry) .	60
FACULTY OF MEDICINE		University Extension Certificate in accounting	2
Doctor of Medicine	89	Certificate in landscape architecture	2
Master of Science	14	Certificate in secretarial studies	14
Doctor of Medical Science	9	College of Pharmacy	
FACULTY OF ENGINEERING		Bachelor of Science	34
Bachelor of Science	45	Doctor of Pharmacy	4
Chemical Engineer	45 11	FACULTIES OF POLITICAL SCIENCE,	
Civil Engineer	ı	PHILOSOPHY, AND PURE SCIENCE	
Electrical Engineer	2	Master of Arts	516
Engineer of Mines	4	Doctor of Philosophy	199
Mechanical Engineer	5		
Metallurgical Engineer	4	Teachers College Bachelor of Science	462
Master of Science	34	Bachelor of Science (New College)	92
FACULTY OF ARCHITECTURE		Master of Arts	_
Bachelor of Architecture	6	Master of Science	12
Master of Science	9	Doctor of Education	38
FACULTY OF BUSINESS		Professional diplomas	55
Bachelor of Science	0 =	BARD COLLEGE	
Master of Science	95 <b>5</b> 9	Bachelor of Arts	34
Certificate in Secretarial Studies	10	Union Theological Seminary	
		Master of Arts	14
FACULTY OF JOURNALISM			
Master of Science	54	Total degrees, certificates, and diplomas	5,205
FACULTY OF LIBRARY SERVICE		Number of individuals receiving	
Bachelor of Science	183	them	5,140
Master of Science	23	<del></del>	27-42
Certificate in library service	9	College of Pharmacy	
FACULTY OF DENTAL AND ORAL		Graduate in Pharmacy	80
Surgery		University Medals for Excellence	4
Doctor of Dental Surgery			
Certificate in dental hygiene	52	Honorary Degrees	14

### STUDENT ENROLLMENT

		Totals	Gain	Loss
I. RESIDENT STUDENTS				
A. WINTER AND SPRING SESSIONS				
Undergraduate Students:				
Columbia College	1,832		29	
Barnard College	955			31
University Undergraduates	127			42
Bard College	116			26
				_
Total Undergraduates		3,030		70
Graduate and Professional Students:				
Political Science, Philosophy, and Pure Science	3,178		101	
Architecture	64		2	
Business	568		27	
Dental and Oral Surgery				
Dentistry	235			5
Dental Hygiene	53		4	
Engineering	295		49	
Journalism	62		1	
Law	506			27
Library Service	458		38	
Medicine	483		31	
Nursing	172		85	
Optometry	109		10	
Pharmacy	331			35
Teachers College	7,983		35	
New College of Teachers College	195			37
Total Graduate and Professional Students .		14,692	279	
B. SUMMER Session (1938) including undergrad-				
uate, graduate, professional and unclassified				
students	11,822	11,822	13	
C. University Classes (University Extension) Reg-	,	,	-3	
ular courses (net)	5,400	5,400		403
Gross Total Resident Students		34,944		212
Less duplicate registration		2,704		
Net Total Resident Students		32,240		379
II. NONRESIDENT STUDENTS				
University Extension				
Extramural Courses	2,644		315	
Special courses	758	1	223	

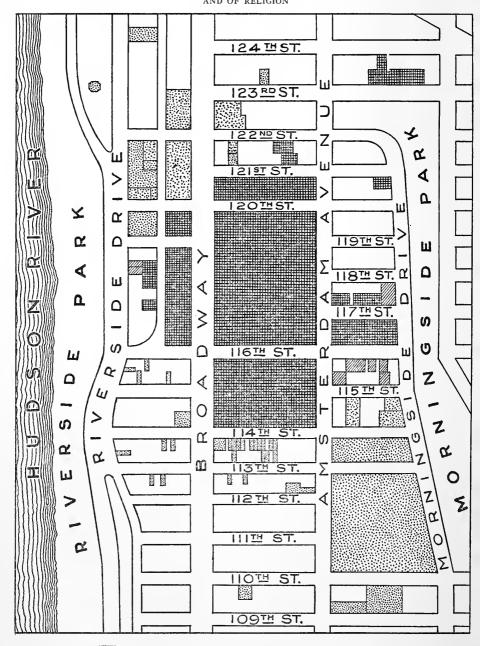
RELATION TO MORNINGSIDE HEIGHTS
OF MEDICAL CENTER AND BAKER FIELD





### MORNINGSIDE HEIGHTS

A CENTER OF INSTITUTIONS OF LEARNING, OF THE HEALING ART
AND OF RELIGION

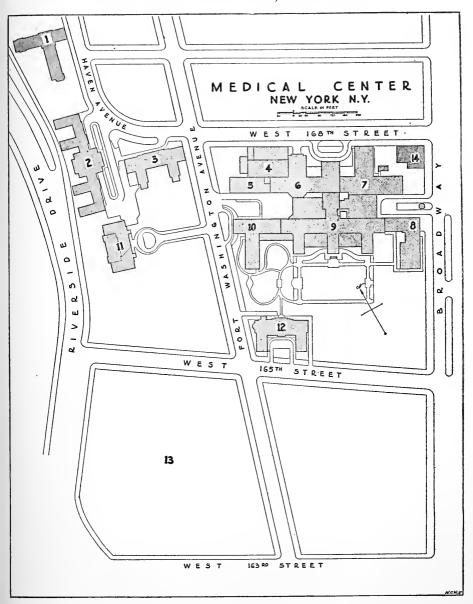


COLUMBIA UNIVERSITY PROPERTY FOR EDUCATIONAL PURPOSES

OTHER COLUMBIA UNIVERSITY PROPERTY

OTHER PUBLIC INSTITUTIONS INCLUDING FRATERNITY HOUSES

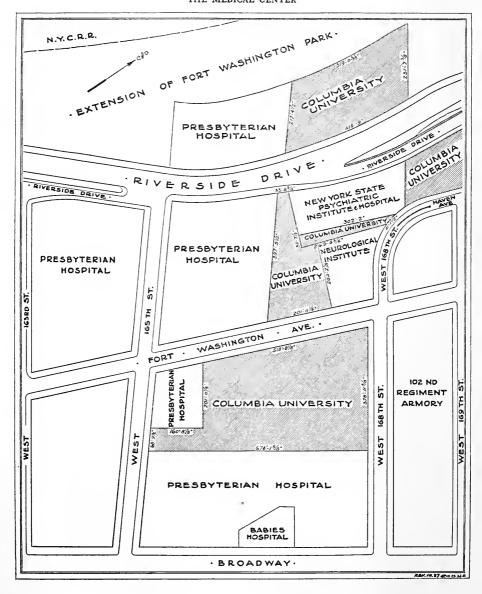
PLAN OF BUILDINGS AND GROUNDS, MEDICAL CENTER



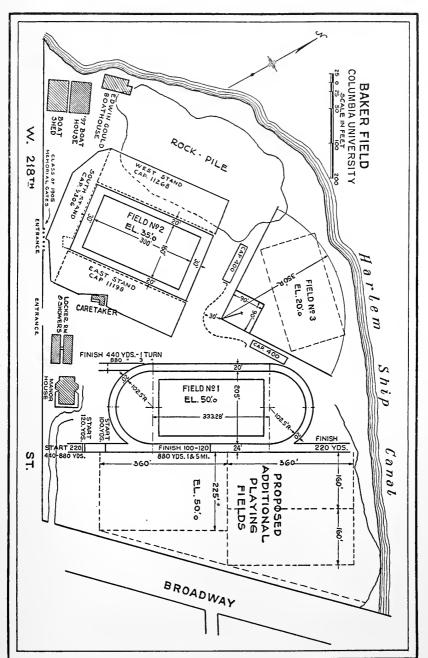
- 1. Bard Hall
- New York State Psychiatric Institute and Hospital
- 3. Neurological Institute
- 4. Power Plant
- 5. Service Building
- 6. College of Physicians and Surgeons
- 7. Vanderbilt Clinic
- School of Dental and Oral Surgery
- 8. Babies Hospital

- 9. Presbyterian Hospital
- 10. Harkness Pavilion
- 11. The Presbyterian Hospital School of Nursing
- 12. The Institute of Ophthalmology of Presbyterian Hospital
- 13. Newly acquired property of Presbyterian Hospital
- 14. Washington Heights Health and Teaching Center

OWNERSHIP OF LAND INCLUDED IN THE MEDICAL CENTER



BAKER FIELD
THE STUDENTS' PLAYING FIELDS OF COLUMBIA UNIVERSITY



### COLUMBIA COLLEGE

#### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

As Dean of Columbia College I have the honor to present the following report for the year 1938–39.

In last year's report mention was made of proposed changes in the administration of the Residence Halls. These changes have now been in operation during the year under review, and involve the appointment of two officers who jointly have charge of the Halls. The Residence Halls Committee, which for some years past has been almost an executive committee, now concerns itself with policies, leaving the details of administration entirely to the Director of Residence Halls and to the Head of the Halls. Under the wise and intimate administration of these officers new impetus has been given to the movement, now fifteen or more years old, in the direction of correlating residence as closely as possible with the educational work of the College. Perhaps the most important innovation is the fitting up of the Grill in John Jay Hall with facilities for serving refreshments, especially in the evening, and the stimulation of the student body to use it as a rendezvous for the informal groups so important for the college student. The place is called the Lion's Den, and its organization received the cordial and helpful support of the Board of Student Representatives as well as of the administration of the Halls.

With the support of the Student Board, a Dormitory Association is being organized. This Association will consist of an elected member from each floor of each Hall, and will be divided into four subcommittees, one for each of the dormitories. Because Hartley and Livingston Halls are reserved exclusively for students of the College, the individual Hall committees will represent homogeneous student opinion. This gives the proposed plan increased prospects of effectiveness.

The Dean's Fund, which is maintained by student enterprises to provide a source of small loans of money to meet minor financial emergencies, continues to be of great service. During the year \$1,649 has been

loaned, in amounts never exceeding \$15 at a time, to 179 students of the College. These loans and some holding over from former years have been paid back to the amount of \$1,572. Contributions have been received as follows: individual gifts, \$295; Block Dance, \$144; Dean's Drag, \$578; Society of Older Graduates, \$1,200.

The Dean's Lending Library of textbooks available to students of the College has continued to operate. During the year 362 students have made use of this service. Since most of the books are returned at the end of the year, the drain on the Dean's Fund is not heavy.

It is a matter of perennial concern why students find it necessary or desirable to leave college. Each year the reasons given for withdrawal are carefully scrutinized. The Assistant Registrar sends a letter to each non-returning student requesting information on this point, and the answers are classified under the headings "Discipline," "Finance," "Health," "Scholarship," "Transfer to Another College," and "Taking a Job." But the results are by no means completely clear. A student's scholarship may be poor because of poor health or lack of money. Or, for financial reasons rather than academic, he may enter another college where the fees are less. And he may take a job because he needs the money rather than because he no longer wishes to go to college.

Between 110 and 120 students have withdrawn at some time in each college year for the past five years. Of these 22 percent apparently left on account of financial reasons, and 15 percent for poor scholarship. About 20 percent of those who withdrew entered some other college. This amount of shrinkage does not seem unusual, especially at a time when the financial situation is as difficult as it has been of late. Careful study of the Class of 1938 shows that, of the students who entered in 1934, 64.5 percent received the baccalaureate degree at the end of four years, while a total of 73 percent of the class had received the degree at the end of five years. This figure is probably slightly smaller than the corresponding percentages in some of the smaller independent colleges, and much larger than those of the state universities. Nevertheless, it is extremely difficult to determine the primary reason for discontinuing college from an inspection of our records or from the replies received to our requests for information. Efforts are being made to find some more reliable method of obtaining significant data on this very important problem.

During the past few years the activities and influences of the Religious Counselors have gradually become more significant in the life of the College. The Counselors are appointed under the joint recommendation of committees of graduates who are members of the Catholic, Jewish, and Protestant faiths, and the Administrative Board for Religious and Social Work. Their scope is University-wide, but it is probable that their contacts with College students are more numerous and important than with members of other units of the University. The fact that the Counselors work as a team, each seeking to assist in the development of a religious life that will bring the maximum of satisfaction to each individual, rather than acting as advocates for their particular sects, accounts in a large measure for the respect in which they are held by the College community.

A difficult problem in this connection has to do with the allocation of space for the work of the religious interests, including both the work of the Chaplain and of the Counselors. Earl Hall was a gift to the University in 1901 as a home for religious work of every variety and for every person of whatever faith. The work of the University Medical Officer is closely related to that of the religious interests, and, pending the provision of more adequate quarters, he has been assigned space in Earl Hall. This was due in part to the fact that for many years after the building was erected the entire space was not needed by the religious interests. Also, awaiting the much-needed building for the housing of the aesthetic activities of the University, including dramatics, music, and the fine arts, a considerable portion of the space in Earl Hall has been temporarily assigned to dramatics. This work is also carried forward effectively and enthusiastically and is an exceedingly important feature of the instructional and extracurricular activity. With the building as crowded as it now is, no one of these groups has the opportunity to do its work either to the satisfaction of the students and the Faculty of the College or of other schools of the University. It should be kept in mind, however, that the building was donated explicitly for the religious work of the institution, a provision that is not being completely fulfilled. Realizing the difficulty, during the latter part of the year plans were made for certain structural changes in the main floor of the building which would increase the space available for the Religious Counselors. As is the case with so many other questions facing us, it is primarily a matter of the budget. In the present time of financial stress the only manner of meeting the situation seems to be to obtain funds from some source outside the regular University budget. It is hoped that during the course of the coming year progress in this direction may be made.

One of the insistent problems facing the College is that of affording the best possible education for those who expect to enter the profession of teaching in the secondary schools. We hear the opinion expressed on every side that the only hope for the preservation of the type of government in which the individual has a chance to develop to his full stature lies in our being able to provide intelligent teachers, well grounded in subject matter, aware of their social and civic responsibilities, and endowed with the personality and attitude that will make them the influence in their communities that they ought to be. The importance of the problem is indicated by the organization, under the American Council on Education, of a Commission on Teacher Education generously financed by the General Education Board for a five-year study of this problem. Columbia has been invited to coöperate in the work of this Commission as one of about thirty institutions and school systems.

For many years Columbia College has made a serious attempt to provide a broad liberal arts education adapted to the needs of those intending to follow the various professions. The situation facing the prospective teacher is at once more complex and simpler than that facing the premedical student, for example. In the first place, the medical school itself provides the subject-matter topics of anatomy, physiology, and the like as well as practical clinical experience, thus relieving the college of offering professional subject matter. To be sure, many prospective medical students tend to fill their junior and senior years with courses that are close to their professional subject-matter fields. It should be remembered that the best medical schools deplore such use of the opportunities afforded by the college, preferring to admit students to the medical school with as wide, rather than as narrow, a training as possible. For the prospective teacher, however, the liberal arts program and the subject matter for the professional work of teaching are inextricably mingled in the college program. That which corresponds to the clinical work of the medical school is offered in Teachers College. I realize that there is a difference of opinion as to the value of specific teacher-training work. Some feel that the prospective teacher's entire schooling should be devoted to subject matter in the fields that he proposes to teach. At present, however, there is little room for argument, since State requirements for a teaching certificate in public schools prescribe detailed and specialized courses in the art of teaching. Furthermore, the evidence from high school principals and school superintendents is overwhelmingly to the effect that such work at least affords an easement over the difficult period of adjustment during the first few years of teaching. In any case, Columbia College must attack seriously the problem of affording those who wish to enter the teaching profession the very best preparation that our facilities permit.

As in the case of the other professions, the first and perhaps the most important need is to clarify for prospective teachers the nature of the teaching profession in order that those whose temperaments run in other directions may be deterred. This involves individual acquaintance with our students and the careful analysis of their qualities. Evidence from many parts of the country indicates that our teachers in the public schools too often lack adequate background in knowledge, both of their subject matter and of human nature. Many possess neither the social nor the scholarly competency which teachers of our youth should have. To do our part in correcting this situation is one of our responsibilities. This is the kind of personnel service which we are endeavoring to offer. Its importance should be realized, not only by our Advisers, but also by every member of the teaching staff.

The next problem is to provide for the prospective teacher subject matter which will have correct balance between spread and specialization. It must be kept in mind that our best information indicates that only about 10 percent of the teachers in public high schools are assigned to teach exclusively the subject of their major study in college. That is, if a student concentrates on chemistry, for example, as intensively as required in many colleges for a major in that subject, he has only a negligible chance to teach that subject exclusively. In fact, relatively few schools offer enough sections of any one subject, except English, to occupy one teacher's entire schedule. If this is true, it is essential that we see to it that our prospective teachers obtain a sufficiently wide range of instruction to insure some competency in several subjects. Of course, one cannot be expected to take every subject in the college curriculum. Nevertheless, those

who expect to teach should not specialize in the Upper College too narrowly. With the present provisions for flexibility in program-making in Columbia College it is probable that this difficulty is well taken care of, always provided that we are sufficiently well acquainted with the plans of our individual students.

In order that a student may obtain the breadth of subject-matter preparation that the profession of high school teacher requires, it is essential that most of his four years be devoted to this end. Of all the professions, that of teacher most needs the full four years of liberal arts work. To include in these four years more than a minimum of specific teacher-training courses defeats the whole purpose of our efforts. Consequently, as indicated in my report of two years ago, those who look forward to this profession are expected to complete the necessary professional courses in Teachers College in a fifth year, usually leading to the degree of Master of Arts, either in Teachers College or in the Graduate School. When this plan is fully in operation, only such Teachers College courses should be accepted for credit toward the A.B. degree as may be justified on the ground of helping the student fully to realize that this is the direction that he ought to take, and as a reasonable preparation for the work of his fifth year.

During the last few months frequent conferences have been held with members of the Teachers College Faculty in order that an effective plan may be devised. It is obvious that at the end of the sophomore year each student who expects to teach should make his plans for the next three years as a unit rather than consider his fifth year as independent of his undergraduate work. To meet this situation, a program is planned for next year which will be given by Teachers College and will include, among other courses, seminars in the major subject-matter fields. In these seminars the attempt will be made to review the work that the student has taken in college from the point of view of presentation to high school students. It is anticipated that those teaching these seminars will acquaint themselves, through frequent attendance in College classes, with what the College students have done, and will be able to present the material in such a manner as to give the student a clear understanding of his chosen professional work.

All of this preparation for better attention to prospective teachers was

planned before Columbia was invited to be one of the coöperating institutions in the investigations of the Commission on Teacher Education mentioned earlier. But membership in this group of forward-looking men and women representing every phase of teacher education and school systems provides a most stimulating impetus to our efforts.

In my report for 1937–38 I discussed the extension of our personnel work to insure, so far as possible, for each student a program in the Upper College designed to fit his particular needs. I mentioned the request made to the teaching staff for information regarding students of the Lower College, and the complete and helpful response with which this request was received. The plan of asking each sophomore to write a confidential report for the information of the Dean and of his Adviser was also outlined. This undertaking has been carried out. On December 14 a letter was sent to 440 sophomores requesting a confidential report based on the following suggestions:

The following topics are suggested for your consideration. Feel free to disregard any of them. Make this report your own.

## College Influence

- a. What, if anything, particularly pleased or disappointed you in your first year in College?
- b. In what respects has your college experience in or out of class affected you, as, for example:
  - 1. Interest in literature, the arts, social studies and the sciences.
  - 2. Point of view regarding personal appearance, or social behavior.
  - 3. Standards of ethical and moral behavior. Religious outlook and social philosophy.
  - 4. Împortance of hobbies, social affairs, and other extracurricular activities.

#### The Next Two Years

- a. How many more years do you expect to have in Columbia College?
- b. Indicate as clearly as you can what you wish to get from the next years, and list those courses that seem to you to contribute to this end, underlining those that you regard as particularly important for you.
- c. Without regard to vocational plans, have you selected a department or field for concentrated study? Mention the reason for your choice and any foundation that you have already laid for such study.

## After College Plans

- a. For what calling would you like to prepare? Mention any that you have considered.
- b. How long have you been fairly certain of your vocational ambitions?
- c. What influenced you to make this choice? With whom have you consulted about it?
- d. If you are in doubt, what is the basis of the doubt? Lack of interest, doubt of ability, financial stringency, or some other reason?
- e. Are you more, or less, certain of your choice now than when you entered college?
- f. Do you feel that you are making satisfactory progress in your chosen direction? If not, why not?
- g. If you have no definite choice at present, which of your interests or abilities do you think are most likely to contribute to success in some vocation?

## Personal and Family Matters

- a. Do you have a good physical inheritance? Has poor health interfered with your college work? What is your favorite form of exercise?
- b. Do you get enough sleep? About how much?
- c. Were you as well prepared for college as you think you should have been? What should have been changed?
- d. Are your parents familiar with the aims and procedures of the College? Do you talk over your college problems with them? Are most of the decisions regarding your affairs made by your father, your mother, yourself, or in conference?
- e. With whom on the College staff have you talked about college or other problems? Have you felt free to seek counsel from your Adviser or instructors?
- f. Have you any worries that have interfered with your college work?
- g. Do you make your own way financially, or any part of it? How much does your family help you? Can this help be continued during the rest of your course?
- h. Will you be required to assume financial burdens immediately after graduation? E.g., will you have to pay back money borrowed for your education? Support your family? Support yourself?

Replies were received from 90 percent of the sophomores, a response which far exceeded expectations. They were distributed to the various Student Advisers who read them and held a conference with each student on the basis of the material which he had handed in. I have also talked with many students regarding questions which were raised in their replies to my letter.

After these interviews, I recalled all the reports, read them carefully, and took notes on each to obtain any suggestions that might shed light, either on the problems of the individual student, or the state of the College from the student point of view.

Many of the reports were very full, some of them running to ten typewritten pages. Many of them expressed appreciation for the opportunity to analyze their college experience quietly, with the certainty that the results would be of help to them, to their advisers, and to the College. Almost without exception they were serious and objective, often giving information concerning personal or social actions and attitudes that were most confidential.

Their suggestions cover a wide range, all the way from sweeping changes in the curriculum and the staff to the removal of the coal pile at the corner of 114th Street. Some of the observations are very interesting. I quote a few of them: "A student is without a soul when he is without school activities." "I believe that doing one's work to the best of one's ability is as good an indication of character as the number of managerships one holds." "At first I was lonesome, but then I made the discovery that in order to have a friend one must first be a friend." "I was amazed by the wide range of knowledge shown by my instructors. They can argue around me in circles, prove that black is white and then scold me for being convinced." "I have found that it is always best to judge others by their own standards."

A considerable number of the sophomores express disappointment over the lack of "college spirit." In many cases the idea of "college" had been gained from motion pictures and from the newspaper accounts of the lighter side of some colleges. This kind of illusion is, however, short-lived. For the most part the students find the tempo of college work much faster than that of school, and for many boys the period of adjustment during the freshman year is difficult. But gradually they realize that in the college community they are really units in a society, a discovery that affects the entire attitude of many. In matters of religion the trend is toward what might be called a somewhat humanistic position—agnostic is too strong a word for it. But the development of tolerance toward those who

hold different creeds is almost universal. Appreciation of the influence of the Religious Counselors is often expressed.

Those who commute do not vary as much as anticipated from other students in their reactions to college. About 60 percent of them require between six and fourteen hours a week for travel, only 13 percent over fifteen hours. They devote almost exactly the same number of hours to study as those who live in the Residence Halls, the median being about one and one-half hours for each hour of classroom attendance. The percentage of commuters who work for their support is only about half as large as that of Residence Hall students, the time used for travel apparently being an alternate for time used for earning money. The most striking divergence between those who commute and the rest of the sophomores is shown by their reaction to the courses in Humanities and Contemporary Civilization. Over half of the commuters go out of their way to express the greatest appreciation for what the courses in Humanities have contributed to their intellectual life, and about half that number mention Contemporary Civilization. This is nearly twice as large a proportion as holds for the Residence Hall men. It does not appear whether the students who come from more remote points are not as well prepared for the values that might be obtained from these courses, and hence get less out of them, or whether they take them as a routine matter and do not think it necessary to say anything about them.

Not infrequently interests not directly connected with studies are revealing. This is true not only regarding the individual, but with respect to the whole group. These interests cover a very wide range, but many more than was anticipated express an absorbing interest in music. Although a few indicate that their special hobby is performing or listening to swing or other types of contemporary music, most of them state that their greatest satisfaction comes from the more classical composers. About 40 percent of the sophomores mention music as a hobby or serious extracurricular interest. The largest percentages of those indicating interest in music come from the scientifically minded students.

A careful study was made of the small group who did not send in any reports. It was thought that they might consist chiefly of some one type of student, either the good or the poor student, the dormitory resident or the commuter, the fraternity man or those in some one of the pre-

professional groups. No results of any significance could be drawn from this study, although a somewhat disproportionately large number of fraternity members did not send in reports.

In the present report it would be out of place to do more than indicate the salient points obtained from the confidential letters of the sophomores. Enough has been said to show that this experiment has more than justified itself, both for information of immediate value in advising the students and for the direct evidence which it gives concerning the impression which the College makes upon her students. It is always useful to learn what friendly critics think of us. The experiment, with slight modifications, will be continued.

The reports are invaluable when considering with a student his academic plans for the Upper College. His own analysis of his experiences in the first two college years provides the most natural point of departure for such a discussion. Experience serves to emphasize the soundness of the policy of not automatically requiring for graduation a certain large number of credit points in some field of concentration. Those students who will proceed to professional schools or the graduate schools will be obliged to concentrate in one field with sufficient intensity. For such students work built on that of the Lower College but not necessarily confined to any one department or field has been the policy of Columbia College for several years. For those who do not propose to continue with university work after graduation from the College the amount of desirable specialization for graduation depends upon the individual.

For all these reasons it is of the greatest importance, in making plans for the work in the Upper College, that all possible pertinent information about our students shall be gathered and available both for them and for their advisers. As I have remarked in previous reports, the easiest way would be to abdicate all individual responsibilities and get behind a rule about majors and concentration. The easiest way, however, is seldom the wisest one. Human nature is too complex for such a method. The evidence contained in these reports indicates that, with rare exceptions, the young men who are hoping to enter the professions realize the importance of their Lower College work in the social studies and in the humanities. It was the rare exception that a student expressed the feeling that such a broad background is not a welcome and an essential part of effective edu-

cation for professional work, although a few, particularly in the premedical and pre-engineering groups, seemed to feel that they contained nothing "useful." I think the latter attitude is usually evidence of intellectual immaturity.

Ever since the report of the Committee on Revision of the Curriculum two years ago, the task of putting its recommendations into effect has gone forward. The first tasks were the reorganization of the Lower College by the introduction of the course in Humanities, the reorganization of the work in English composition, and various other changes. So far as the Upper College is concerned, it was not intended to modify the curriculum to any greater extent than the departments would propose. The primary need here was in the direction of seeing that every student was informed of his opportunities, and aware of his capacity to take advantage of them.

The Committee on Revision suggested that each student of the Upper College should have as his adviser some member of the department of his greatest interest. This matter has received careful consideration by the Committee on Instruction and the Assistants to the Dean. Such departmental advisers have been appointed, and are published in the Announcement for 1939–40. It seems likely, however, that the formal responsibility for approving schedules will be retained by the appropriate Student Adviser because of his greater familiarity with the formal requirements for the degree, reserving for the Upper College advisers such personal and academic advice as the student naturally seeks from them.

The entire enterprise described in the preceding pages, involving as it does every student and every member of the teaching staff in the effort to enable each student to obtain the maximum from his college experience, might seem at first glance to be somewhat removed from the primary function of a college in a university. One might assume that the young man who enters a liberal arts college connected with a university thereby indicates his competency to find his own direction. It is true that it is possible to throw the reins over the backs of many students with full confidence that they will follow paths suited to their own needs. But for each one of this type there are several who are confused, unaware either of their own capacities or of the best way to improve such capacities as they recognize. Particularly does the liberal arts college in a university have a

heavy responsibility for a careful personnel job because of the complexity of its situation. The student in the usual independent liberal arts college which has no graduate or professional school attached, pursues a four-year curriculum with only such choice of courses as the liberal arts program provides. His specialization is limited by the resources and regulations of the college itself. It goes without saying that there is abundant need for knowing the students in such an institution and helping them to analyze their abilities, interests, and opportunities. But in the college in the university, this same need is increased and emphasized by the complex relations with the various other schools of the university and by the greatly augmented number of courses, both undergraduate and graduate, open to students.

The opportunity which a liberal arts college in a university provides for the education of her students on a broad front carries with it the responsibility of seeing that they are not confused or embarrassed by the wealth of offerings. A person is not lost because he is in a large or complex situation. He is lost only if he does not know his way. Adequate paths and guideposts, easily observed and clearly expressed, are almost as important for the student as the offerings themselves. This fact, which is easily overlooked, accounts for the thought and effort that Columbia College is devoting to the major activities here mentioned.

Respectfully submitted,

Herbert E. Hawkes,

Dean

June 30, 1939

## SCHOOL OF LAW

## REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

As Dean of the Faculty of Law, I have the honor to submit the report of the School of Law for the academic year ending June 30, 1939.

During the last ten years, practically every law school in the United States worthy of the name has been engaged in some form of curriculum revision. This widespread activity is symptomatic of a growing conviction not only among law teachers, but among practicing lawyers and judges, that there is need of change in legal education. The Faculty of Columbia Law School were among the pioneers in curriculum revision. Today their new case books, some twenty-eight in number, are used in varying degree in 117 of the 180 law schools in the United States. Other law schools have published numerous new case books and other teaching materials which have aided greatly in curriculum revision. But the dissatisfaction with legal education persists. Indeed the agitation for more basic changes is greater today than it was ten or fifteen years ago. This fact indicates that the developments which have taken place are inadequate.

An examination of the revisions to date shows that the emphasis has been upon improving professional training, whereas attempted improvements in the general education of law students have been few, unsystematic, and sporadic. In other words, the reforms have been directed toward better training in law rather than toward the better education of lawyers.

The reasons why the developments have been largely confined to changes in professional training are first, there was need for improvement in professional training which law teachers were capable of making; second, it was impracticable to do much more within the limits of a three-year curriculum. Besides, law teachers, as a class, were not qualified to work effectively with subject matter other than law.

While in a number of schools the three-year curriculum has been broadened to include some non-legal subject matter as background for law

study, projects of this character have invariably been subordinated to the necessity of giving the student adequate professional training which requires the better part of three full years. Thus the law schools have continued to rely upon the colleges to provide most of the work in subjects other than law.

The Dean of the Harvard Law School in his recent report points out that too often the deficiencies of law school graduates spring from the lack of adequate training preliminary to the law school. Thus, he states, that additional instruction in jurisprudence, Roman law, or comparative law will never make up for an incapacity to express oneself or for inability to think with precision and direction. Likewise, acquiring some familiarity with the refinements of the law of corporations will not fill a void created by ignorance of the pressures that have directed our evolving civilization. Consequently Dean Landis suggests that what is needed is a better coördination of the college program of study with that required in the law schools with a view to making the seven years from college matriculation to law school graduation a "true continuum seamless in spirit and directive."

Much may be said in support of Dean Landis's suggestion, but the amalgamation of college and law school training into a seven-year "continuum" is doubtful of achievement since college education is not and should not be primarily directed toward preparing young men for the law, and since in many law schools the students are drawn from a large number of colleges throughout the country over which there is not and cannot be a unified control. Unfortunate though it may be, the college's part of the lawyer's training and the law school's part must continue to be more or less separate educational processes. But much of what Dean Landis has in mind could be accomplished if there were a redistribution of the work between the colleges and the law schools, both with respect to subject matter and to time, with a view to giving the law student at the end of seven years a better coördinated training than he is now receiving.

That the college alone and unaided cannot provide adequate background for legal education is due to a number of factors. Because of the heterogeneous character of college students and their diverse interests and aims, the college curriculum can only partially meet the needs of any

<sup>1</sup> Report of the Dean of the Harvard Law School (1938-39), pp. 7-10.

one group. Courses most beneficial to prospective lawyers would not be the best courses for prospective doctors, engineers, or businessmen. Consequently many college courses are of necessity a compromise between the conflicting interests of the various groups of college students. To some extent, special courses are offered in college to meet the needs of special groups, but these offerings are not uniform in the numerous colleges and in the case of prospective law students there is no agreement as to the kind of courses best suited to their needs. Another and probably the greatest obstacle to providing in the college adequate background for legal education is the attitude of the average college student toward his work. Established traditions in the American college do not encourage the same seriousness of purpose and the industry that one finds in the professional schools; besides a considerable part of the college student's time is devoted to extracurricular activities which, however desirable, make impossible the intensive work in courses which takes place in professional schools. Even were it otherwise, it would be difficult for the college student taking, for example, a course in American political history to appreciate the relationship with law unless he were simultaneously engaged in a study of constitutional law. Likewise, a study of the economic side of finance, taxation, or marketing would lose much of its significance to the prospective law student unless at the same time he were engaged in a study of the law of those subjects.

The problem, so far as legal education is concerned, is to bring about a greater coördination between certain subjects now studied in college and related subjects now studied in law school without destroying the primary and separate educational functions of either the college or the law school.

It is believed that much of the needed coördination between what is now college and law school work could be achieved if, instead of the student spending four years in college and three years in law school, he spent three years in college and four years in law school. The purpose of this shift would not be to increase professional education at the expense of general education, but to integrate at least one year of general education with the present three years of professional education. In other words, at least one fourth of the proposed four-year law school course would be devoted to subjects such as history, government, economics, and philosophy, but the courses would be specially organized to meet the needs of

lawyers and would be given during the four years simultaneously with or as part of law courses dealing with the same social, political, or economic problems. Moreover, by giving these courses in law school, instead of in college, the student would better appreciate their significance because he would see the connections between them and the law, in which it must be assumed he has an intense interest. While the work in these non-legal subjects would thus be incorporated in the law school curriculum, it is not necessary that they be taught by law teachers. On the contrary, the inclusion of these subjects would afford an excellent opportunity for the law school to avail itself of the assistance of selected members of the Graduate Faculties in the teaching of law students, thereby enriching the instruction with a less professional point of view.

Such an arrangement does not mean that the requirements for an A.B. degree would be shortened from four to three years. The college would continue to require four years work for the A.B. degree, except that a student, after three years in college, could enter an approved law school with the kind of four-year curriculum suggested, and meet the fourth year's requirement for the A.B. degree by completing a year's work in the law school. He would later receive the LL.B. degree after three more years in the law school. There would be no difficulty in making this arrangement between a college and law school within the same university. Already the professional option is an established practice in many universities, and in a number of instances colleges have provided the professional option in conjunction with professional schools in other institutions. These arrangements have been made although the work in the professional schools contains little that could be called liberal as distinguished from professional education. Certainly the plan here suggested should be more appealing to the colleges than the professional option arrangements now in operation. If the leading law schools added to their present curriculum a year of nonprofessional but integrated work, it is difficult to see on what grounds the colleges could justifiably refuse to permit those students desiring to study law to transfer to law school at the end of the junior year, and offer a year's work in the law school in lieu of the senior year in college. These are matters which would have to be worked out by the colleges and law schools. There should be no insuperable difficulty in working them out, once it is agreed that the plan is educationally sound.

It must be recognized that transferring a year of the student's work in nonprofessional subjects from the college to the law school will not accomplish all that may be desired. The development of the student's ability to think with precision and direction and express his thoughts clearly and accurately must begin long before his law school or even his college days. His powers of thought and expression can be improved in law school, but unless he has acquired a reasonably adequate capacity in these respects at an earlier stage in his development, there is not much that the law school can do for him. The truth is that such students are not qualified for law school and should not be admitted. To the extent that their deficiencies are due to their earlier education, the responsibility rests upon the colleges and the secondary schools. The proposal to coördinate part of what is now college work with what is now law school work is aimed at improving the advanced education of young men desiring to become lawyers who have acquired the capacities of thought and of expression that are prerequisite to success in legal work.

#### THE FACULTY

During the year, several books and twenty-eight articles in legal periodicals were published by members of the Faculty. Included among the books are: A Collection of the Neutrality Laws, Regulations and Treaties of Various Countries, two volumes (Carnegie Endowment for International Peace, 1939), by Professors Deák and Jessup; The Cuban Fiscal System (The Cuban Treasury, 1939), by Professor Magill and Professor Carl Shoup of the School of Business; Cases and Materials on Creditors' Rights, third edition (Foundation Press, 1939), by Professor Hanna and Professor McLaughlin of Harvard Law School; Cases and Other Materials on Domestic Relations, second edition (Foundation Press, 1939), by Professor Jacobs; Early American Land Companies (Commonwealth Fund, 1939), by Shaw Livermore, published under the direction of Professor Goebel.

In addition to their publications, a number of the Faculty were engaged in various research projects. Professors Chamberlain, Dowling, and Hays were engaged in a study of the judicial functions of Federal administrative agencies, pursuant to a grant from the Commonwealth Fund. Professor Goebel, as director of the Columbia Foundation for Research in Legal

History, was engaged in bringing to completion the following historical studies, financed by the Commonwealth Fund: Appeals to the Privy Council from the Colonies in the Eighteenth Century; Control of Business in Medieval England; Control of Business under the Early Tudors; Criminal Procedure in Colonial New York. Professor Schiller was engaged in the preparation of an edition of a bilingual Greek and Latin text known as the Sententiae et Epistolae Hadriani with extensive commentary, and the edition and translation of a Coptic legal papyrus. He also continued the preparation of material for the second volume of his Texts and Commentary for the Study of Roman Law. Professor Hale was engaged in completing his book Freedom and Coercion in America. Professor Hyde was engaged in revising his well-known treatise on international law. Professor Handler acted as special assistant to the General Counsel of the Treasury of the United States, acting as director of studies which are being made by the Treasury for the Temporary National Economic Committee. Professor Wechsler was appointed director of research of the New York Law Society, an organization of lawyers interested in law reform and the improvement of law administration, primarily in the procedure field.

As in years past, a number of the Faculty, in addition to their teaching and research, were engaged in various forms of public service. Professor Berle, who was on leave during the Winter Session, was Assistant Secretary of State. His work in Washington is so well known it needs no comment. Professor Gellhorn was appointed director of the Attorney General's Committee on Administrative Procedure, and will devote his full time to this important work during 1939-40. Professor Patterson brought to a close his work as chairman of the Committee on Insurance Law Revision of the New York Insurance Department. This comprehensive revision of the insurance law was begun in 1935. In its completed form, it became law in New York on June 15, 1939. Professor Patterson will continue to act as consultant to the Insurance Department in the framing of regulations under the new law. Professors Powell and Hanna continued their work as reporters for the American Law Institute; and I continued to serve as a member of the Law Revision Commission of New York.

During the year, Professors Powell and Patterson each gave a series of

six lectures as part of the American Bar Association Institutes. Professor Powell's lectures, on the construction of written instruments, were given before the Bar Association of Indianapolis, and Professor Patterson's lectures, on insurance law, were given before the Bar Association of Denver. Professor Handler gave three lectures on the Federal Trade Commission before the Boston Bar Association, being part of a series on Federal administrative procedure.

No changes in the personnel of the Faculty occurred during the year under review.

#### THE STUDENT BODY

In my report for 1938, I called attention to the steadily improving quality of the student body under the system of selective admissions. Of the 180 students entering in 1938, 131 had college records of B or better, of whom 44 had records of B+ or A. I also pointed out the growing number of students coming from outside New York. Of the 180 students entering in 1938, 28.2 percent came from outside the city of New York, and 59.7 percent were graduates of colleges and universities located outside the metropolitan area. The quality of the students coming from other sections of the country is revealed by the fact that in last year's first year class twelve of the eighteen top-ranking students elected to the Board of Editors of the Columbia Law Review came from outside New York City. These eighteen students were graduates of the following colleges and universities: Amherst (1); Brooklyn (1); Columbia (1); Cornell (1); College of the City of New York (2); Dartmouth (1); Denver (1); Georgetown, Kentucky (1); Grinnell (1); Harvard (2); Kansas (1); Massachusetts Institute of Technology (1); New York University (2); Princeton (1); Washington, Washington (1).

With the improving quality of our student body, the number of students who fail to maintain the required scholastic average has correspondingly decreased. The scholastic mortality in the entering classes in 1937 and 1938 was 15.6 percent and 14.4 percent respectively, as compared with an average percentage of failures during the preceding nine years of 23.9, and 41.4 in 1927, the year before the adoption of the selective system.

The entering class admitted in September, 1939, consists of 192 students. This class is drawn from twenty-eight states and from seventy-three col-

leges and universities. It includes 124 students with college records of B or better of whom 52 have records of B+ or A. In this class, 34 percent come from outside the city of New York, and 61 percent are graduates of colleges and universities located outside the metropolitan area.

## REGISTRATION, SCHOLARSHIPS, AND FELLOWSHIPS

# The registration during 1938-39 was as follows:

Graduate students								
Third year—Class of 1939								130
Second year—Class of 1940								167
First year—Class of 1941.								180
Nonmatriculated students								13
Total								
Summer Session, 1938.		•						34
								540
Less duplications				٠				17
Net total								523

During the year the degree of LL.B. was awarded to 117 candidates, and the degree of LL.M. was awarded to ten candidates.

Scholarship aid amounting to \$37,749 was granted to 115 students with awards ranging from \$100 to \$770. Included in this group were residents of twenty-seven states. In addition, \$16,500 was awarded to graduate students and research fellows. These awards included five University Fellowships with a stipend of \$1,500 each, one Special Fellowship with a stipend of \$2,500, one Special Fellowship with a stipend of \$2,500, one Special Fellowship with a stipend of \$1,500.

Eight candidates for the Doctor's degree have been awarded fellowships for the academic year 1939–40. They are: Richard C. Hagan, Instructor in Law, Mercer University; I. Beverly Lake, Professor of Law, Wake Forest College; Mary Coate McNeely, Research Assistant in Law, Indiana University; George E. Palmer, Indianapolis, Indiana; Arthur W. Phelps, Assistant Professor of Law, Ohio Northern University; Russell R. Reno,

Assistant Professor of Law, University of Maryland; Verle R. Seed, Associate Professor of Law, University of South Dakota; John C. Stedman, Assistant Professor of Law, University of Wisconsin.

#### RENOVATION OF KENT HALL

Pursuant to a plan for renovating Kent Hall so as to house more adequately our constantly growing library, and to provide better working quarters for both students and Faculty, I am glad to report that a considerable part of this work has been completed. Two summers ago the students' lounge and seminar room were refurnished. Last summer the three large classrooms were renovated. The lighting and ventilation were improved. The floors were covered with linoleum and new desks and chairs were installed. These changes have added tremendously to the comfort of the students as well as to the appearance of the rooms. Also the large vault beneath the east end of Kent Hall has been cleared for additional stack space for the library.

The remaining needs of the School that are most urgent are: (1) another seminar room; (2) offices for graduate students; and (3) a rest room for women students. With the approaching removal of the post office from the basement of Kent Hall, it will be possible to utilize this space so as to release space on the upper floors, thereby meeting all three needs and also providing more room for book stacks. I have already requested that the space occupied by the post office be reserved for the Law School. Within the near future I shall submit to you plans and estimates of costs for the necessary renovations.

#### LAW LIBRARY

The annual report of the law librarian discusses in detail the recent acquisition of books and developments looking toward an improved library service. During the year 8,010 volumes were added to the library, bringing the total number of volumes to 221,557. Important accessions during the year were the complete Rolls Series of the British Record Office, in 253 volumes, purchased for the use of the Foundation for Research in Legal History. An interesting accession was a manuscript scrapbook kept by Sir Matthew Hale containing among other things a signed opinion by Sir Edward Coke and other manuscripts of similar interest.

Through the intercession of Professor Magill, Columbia is one of the few libraries to receive the six supplementary volumes, comprising the footnote citations, to the report by the Department of Justice on taxation of government bondholders and employees. This is a unique publication, made up for the most part of photostats of documents, articles, etc., referred to in the report. It has been much used by lawyers preparing briefs in opposition to the Government's position on the matter.

The acquisition last summer of the vault under the east end of Kent Hall will take care of the normal growth of the library for a number of years, but the problem of providing adequate stacks will in time again become acute. Nothing short of a new building will provide a satisfactory solution of this and other problems of the School.

#### MOOT COURTS

The importance of moot court work, as a student activity, has been recognized by the Faculty for some time. With the reorganization of the work several years ago, student participation has greatly increased and the quality of work done by a number of the courts is excellent. It is the desire of the Faculty to make the work of the courts more uniform and to provide the benefit of this experience for all students who desire to participate. A committee of the Faculty now has the matter under consideration and should make a report within the next year. The final contest in the Moot Court Competition was held, as formerly, in the House of the Association of the Bar of the City of New York on December 9, 1938. There were in attendance several hundred lawyers. The judges were Hon. Learned Hand, Judge of the United States Circuit Court of Appeals for the Second Circuit; Hon. William M. Maltbie, Chief Justice of the Supreme Court of Errors of the State of Connecticut; and Professor Roswell Magill, of the Faculty of Law. There are today fifteen courts in the School. Since the Harlan Fiske Stone Moot Court Competition was begun in 1925, the competition has been won by the following courts: Burdick (1925); Hamilton (1926); Burdick (1927); Hughes (1928); Marshall (1929); Hughes (1930); Marshall (1931); Holmes (1932); Burdick (1933); Burdick (1934); Blackstone (1935); Hughes (1936); Kent (1937); Campbell (1938).

#### SPECIAL LECTURES

The Faculty Committee on Special Lectures has for a number of years arranged annually a series of lectures on special topics. These lectures have been well attended by the students and constitute a valuable supplement to their work in courses. Last year the lectures were given by Chief Judge Irving Lehman, of the Court of Appeals of New York, whose subject was "Lawyers as Leaders of Public Opinion"; Hon. Herbert Vere Evatt, Associate Justice of the High Court of Australia, who spoke on "Labor Relations under the Federal Constitution of Australia"; Dr. Gerhard Husserl, Visiting Professor of Law, University of Virginia, who lectured on "Law as a Science"; Mr. Paul J. Kern, president of the Civil Service Commission of New York, who spoke on "Civil Service Reform and the Lawyer"; Mr. H. H. Nordlinger, chairman of the Committee on Arbitration of the Association of the Bar of the City of New York, who discussed "Arbitration"; Justice Justine Wise Polier, of the Domestic Relations Court of New York City, who discussed the work of that court.

#### BOARD OF VISITORS

The Board of Visitors, appointed by the Trustees for the academic year 1938–1939, held a dinner meeting in the Faculty House on May 22, 1939. President Butler discussed plans for a law center at Columbia proposed in his annual report for 1937. Professor Dowling outlined plans for the renovation of Kent Hall in order to meet pressing needs of the School pending the acquisition of a new building. Several members of the Board emphasized the importance of improving the working quarters of the School and of providing more adequate space for the library. In accordance with the established policy of changing part of the personnel of the Board of Visitors each year, the Board appointed for the academic year 1939-40 consists of fourteen members of the former Board and seven new members. The new members of the Board are: Christopher M. Bradley, '04 Law, San Francisco; Wilbur H. Cherry, '10 Law, Minneapolis; Louis Connick, '15 Law, New York City; Walter S. Orr, '15 Law, New York City; Province M. Pogue, '91 Law, Cincinnati; Lauson H. Stone, '28 Law, New York City; Cornelius W. Wickersham, New York City. The other members of the Board are: Mason H. Bigelow, '12 Law, New York City;

Judge Mortimer W. Byers, '98 Law, Brooklyn, New York; Thomas E. Dewey, '25 Law, New York City; George A. Ellis, '08 Law, New York City; Russell C. Leffingwell, '02 Law, New York City; Chief Judge Irving Lehman, '98 Law, New York City; John M. Lowrie, '12 Law, Galesburg, Illinois; Alfred McCormack, '25 Law, New York City; George Z. Medalie, '07 Law, New York City; George W. Murray, '76 Law, New York City; Justice Bernard L. Shientag, '08 Law, New York City; Arthur T. Vanderbilt, '13 Law, Newark, New Jersey; Philip J. Wickser, Buffalo, New York; Judge John M. Woolsey, chairman, '01 Law, New York City.

In conclusion, I wish to acknowledge here the fine service and coöperation of my colleagues in carrying on the work of the School during my absence last spring. I am especially indebted to Professor Dowling who, upon my request and with the approval of the President, generously assumed and effectively discharged many of the responsibilities of the Dean.

Respectfully submitted,

Young B. Smith

Dean

December 1, 1939

## SCHOOL OF MEDICINE

## REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

## To the President of the University

#### SIR:

I have the honor to submit the annual report of the activities of the School of Medicine for the academic year 1938–39.

Four hundred and six students were enrolled in the regular course of instruction for the degree of Doctor of Medicine during the year, distributed as follows:

First Year				108	Third Year .			105
Second Year				105	Fourth Year.			88

The usual number of applicants for admission to the first year class was received. The students had prepared in 177 different colleges. The graduating class obtained internships in forty-seven different hospitals in all sections of the country. Fifty-nine students registered under the Graduate Faculties of the University took their work at the Medical School during the year. Instruction in the medical sciences for the School of Dental and Oral Surgery was provided for the students of that school. The number of students in the basic science portion of the graduate medical program was 149. The enrollment in the Department of Nursing was as follows:

First Year .								80
Second Year								90
Third Year								40

Fifty-four students were enrolled in the DeLamar Institute of Public Health.

The Janeway Prize, given to the member of the graduating class "ranking highest in efficiency and ability," was awarded to Donald G. Anderson. The William Perry Watson Prize, awarded for "outstanding work in the study of diseases of children," was given to Henry D. Janowitz. Harold G. Bergen was awarded the Thomas F. Cock Prize for a

thesis entitled "Puerperal Morbidity in Relation to Certain Methods of Induction of Labor." The Harold Lee Meierhof award for "conspicuous effort in pathology" was voted to Stanley I. Glickman of the second year class.

Financial assistance to students of superior qualifications continues to be a real problem. The generous support of the Trustees and the substantial anonymous gift for this purpose have helped greatly. The Alumni Association of the College of Physicians and Surgeons has taken a special interest in this important phase of the School and is making plans to assist through student loans and scholarships. It is gratifying to report that the generous anonymous gift made by a friend of the School last year of full tuition for six students for the entire four-year course has been repeated this year. The liberal assistance from the Charles Hayden Foundation for needy students of the metropolitan areas of Boston and New York has been invaluable. The various sources of scholarship aid have made it possible to assist an increasing number of deserving students. The average grant for the year was \$325.

Although the schedules of class, laboratory, and hospital exercises allow little time for outside employment, a surprising number of students are able to carry remunerative work. During the school year, ninety-one held steady positions and 136 had temporary jobs, exclusive of seventeen who had work under the National Youth Administration. Summer work provided employment for 129. These figures exceeded those of last year and were the highest since the opening of the employment file in the office seven years ago. The aid rendered has been most valuable as a supplement to the scholarships and the loan program. We have had the friendly coöperation of a number of hospitals and now have students working in forty-one institutions. Comparative figures on student employment for the seven-year period are:

	1932-33	1933–34	1934-35	1935–36	1936-37	1937-38	1938–39
Summer	7	20	35	61	86	102	129
School year	82	175	220	250	250	248	227
	—	—		—	—		
Total	89	195	255	311	336	350	356

The proportions of the students receiving scholarships, loans, and employment are of interest:

								I	erceni
Scholarships									25
Loans									5
Employment									44

Of possible combinations, twenty-seven students had scholarship aid only, 102 had jobs only, fifty-seven had a scholarship and a job, eleven had all three forms of aid, and a few had loans and jobs. Fifty-one percent of the students obtained some form of financial assistance.

The Student Health Service under the direction of Dr. Alexander B. Gutman, assisted by Dr. Thomas W. Stevenson, continues to be an important feature of the School. The physical status of every medical student and dental student, and of such graduate students as applied, was checked during the first three months of the school year. X-rays of the chest were obtained of every first year medical student at the beginning of the school year, and of every fourth year medical student at the close of the spring trimester. None of the first or fourth year students was found to have x-ray or clinical evidence of active pulmonary tuberculosis.

A member of the Student Health Service was available for consultation daily at stated office hours throughout the academic year. The figure for total office visits represents an increase of approximately 40 percent over that for the preceding year and is by far the highest in our records. In addition to stated office hours, either Dr. Gutman or Dr. Stevenson was on day-and-night call for emergencies in the School or Hospital buildings, at Bard Hall, or at the homes of students residing in the vicinity of the School.

Free care in the several divisions of Vanderbilt Clinic was available to all medical students and to qualified dental students, as in the past. To prevent abuse of this privilege, medical and dental students were accepted by the clinic only when referred by the Student Health Service. Twenty-two students required hospitalization during the academic year. The Dean was notified by telephone whenever any student was considered too ill to attend classes.

Owing to the growth of the Student Health Service, there is need of

some reorganization of the service, particularly to provide office assistance throughout the year and to have a central office to which all calls can be directed. A new plan will be tried out next year.

The deaths of two of the outstanding members of the Faculty occurred in the past year. The University and the profession at large suffered irreparable loss in the passing of Professors John M. Wheeler and Frederick Tilney. The former was largely responsible for the creation of the Eye Institute, and Dr. Tilney was for many years the moving spirit and recognized leader in the Neurological Institute. It is only upon men of such sterling qualities that the greatness of a school can be built and we all mourn their loss, though ever grateful and proud of their long association with the Faculty. A great loss to the graduate program was the death of Professor Leopold Jaches, of Mount Sinai hospital, one of the leaders of radiology. It is with regret that I also report the death of Professor John Levy, Associate Clinical Professor of Psychiatry.

Several changes of importance in the staff occurred during the year. Dr. James Alexander Miller, after a service of thirty-five years, retired as visiting physician in charge of the Tuberculosis Service at Bellevue Hospital. He will continue his connection with the service as honorary consultant. Dr. Miller's success in building up this service to its present widely recognized level is a notable achievement. On the public health side the service has had a constructive influence in helping to evolve sound and practical medical principles. On the clinical side the quality of care of patients has been greatly perfected during the years. Conceptions of tuberculosis and other respiratory diseases have been developed which have contributed to a real advancement in internal medicine. On the educational side Dr. Miller succeeded in stimulating the interest of students and physicians who have carried the knowledge to many parts of the world. Dr. J. Burns Amberson, Jr., Professor of Medicine, who has long been associated with Professor Miller in this program, has been promoted to the position which Professor Miller has vacated.

Professor Adrian V. S. Lambert passed the retirement age of visiting surgeons at Bellevue Hospital several years ago, but because of his great assistance in developing the surgical program of the Tuberculosis Service he was requested to continue active duty until the service was fully organized in its new building. He now retires after a long and notably success-

ful career in directing the surgical work of that service. His talent as a surgeon and teacher has left an indelible impression upon successive generations of students. Dr. Frank B. Berry succeeds him at Bellevue Hospital.

The retirement of Professor J. Bentley Squier at the end of the academic year is a change of major importance. Dr. Squier, founder and director of the Squier Urological Clinic as well as Executive Officer of the University Department of Urology, has been one of the stalwarts of the Medical Center since its creation. His great skill as a diagnostician and surgeon, his capacity as an organizer and executive, and his stimulating teaching have contributed immeasurably to the strength of the School and Hospital program. Fortunately, his counsel and advice will continue to be available, for, in recognition of his contributions, he has been appointed Emeritus Professor in the University and Director Emeritus in the Presbyterian Hospital, the first time that the latter title has ever been conferred.

During the year Professor Herbert B. Wilcox, long identified with the Department of Diseases of Children and with Babies Hospital, resigned to become Director of the New York Academy of Medicine. Professor Wilcox was largely responsible for the planning and later served as Director of the Babies Hospital during its integration with the Medical Center. His contributions in recent years as Director of the Normal Child Development Study have been of the highest order. A teacher of unusual ability, his leaving is a matter of deep regret, but his new post will permit him to continue his professional contributions in this area. Professor Wilcox was appointed Emeritus Professor in recognition of his long and outstanding career in the University.

The program of the Welfare Hospital for Chronic Diseases described in previous reports has progressed with success and promise. Professor Walter G. Lough has been appointed Director of the First Medical Service to succeed Professor Randolph West, temporary appointee, and Dr. George H. Humphreys has been appointed as Director of the First Surgical Service to succeed Professor William Barclay Parsons.

Professor Russell L. Carpenter, of the Department of Anatomy, resigned to become head of the Department of Zoölogy at Tufts College. Assistant Dean Charles A. Flood has resigned to enter practice but he will continue his teaching and research in the Department of Medicine which

he has combined in the past with his administrative duties. Dr. Flood has shown unusual judgment in dealing with all phases of the student program, and the School loses a valuable administrative officer by his decision to devote himself to clinical medicine, for which he is also eminently fitted. Dr. Lawrence W. Sloan, who has served for several years on part time as Assistant Dean in Charge of Graduate Studies, has asked to be relieved of his administrative duties because of the pressure of practice and his new responsibilities in organizing the residency service in Presbyterian Hospital. The hospital plan in the Department of Surgery is a vital part of the graduate scheme to which Dr. Sloan has contributed so much, and we shall continue to have his advice and help. Dr. Vernon W. Lippard, B.S., Yale, 1926; M.D., 1929, has been appointed Assistant Dean on a full-time basis. He brings to the post experience in graduate medicine, teaching, and practice, and is just completing his work as Director of Study for the Commission for Study of Crippled Children, sponsored by the United States Children's Bureau in cooperation with the New York City and State Departments of Health.

Dr. Phillips Thygeson was appointed Professor of Ophthalmology and Executive Officer of the Department and Director of the Eye Service of Presbyterian Hospital to succeed Professor John M. Wheeler. Professor Thygeson is a graduate of Stanford University and was selected by Professor Wheeler to head the research laboratories of the Department in 1936. Professor John H. Dunnington was promoted to full Professor of Ophthalmology and Clinical Director of the Eye Service in Presbyterian Hospital.

The integration of the Neurological Institute with the other units of the Medical Center is progressing satisfactorily. An important step has been taken in the appointment of Professor Tracy Jackson Putnam as Professor of Neurology and Neurosurgery and Director of the neurological and neurosurgical services of the Neurological Institute, effective October 1. Dr. Putnam was formerly Professor of Neurology at Harvard University and Neurologist-in-Chief to the Boston City Hospital.

Additions of eminent scientists from abroad to the staff include those of Otto Marburg, formerly Director of the Neurological Institute, University of Vienna, in Neurology; Joseph Novak, formerly Professor of Gynecology, University of Vienna, in Gynecology; and Ernst P. Pick, formerly Professor of Pharmacology, University of Vienna, in Pharmacology.

Professor Maurice N. Richter has been appointed Executive Officer of the recreated Department of Pathology at the New York Post-Graduate Medical School and Hospital. At that same institution Professor Charles Ogilvy has been made Executive Officer of the Department of Orthopedic Surgery and George A. Blakeslee, the Executive Officer of the Department of Neurology and Psychiatry. Other changes in the staff include the promotion of Professor William Barclay Parsons and Professor Frank L. Meleney from Assistant Professors of Surgery to Associate Professors of Clinical Surgery and of Professor Enrique Koppisch from Assistant Professor to Associate Professor of Pathology.

Among the Visiting Lecturers during the year were Mr. Bailey Burritt, General Director, Association for Improving the Condition of the Poor; Dr. Edith Lincoln, Associate Professor of Pediatrics, New York University Medical College; Dr. Edwin P. Maynard, Jr., Assistant Clinical Professor of Medicine, Long Island College of Medicine; Dr. Francis E. Senear, Professor of Dermatology, University of Illinois; Professor Hugo Theorell, Assistant Professor, Upsala University, and head of the Nobel Biochemical Research Institute, Sweden; Professor August Krogh, Professor of Zoöphysiology, University of Copenhagen; Professor Melvin H. Knisely, Assistant Professor of Anatomy, University of Chicago; Professor Gösta Dholman, Professor of Otolaryngology, University of Lund, Sweden; Professor Walter W. Cannon, George Higginson Professor of Physiology, Harvard University; and Professor Hallowell Davis, Associate Professor of Physiology, Harvard University.

In addition to the teaching facilities at the Medical Center and at Bellevue Hospital a number of other institutions are coöperating in the program. Advanced training in radiology for graduate students is provided in the Hospital for Joint Diseases, Lenox Hill Hospital, and the Manhattan Eye, Ear, and Throat Hospital. Graduate instruction in obstetrics is given at the Margaret Hague Maternity Hospital in Jersey City and at the Woman's Hospital. Other affiliated hospitals participating in the graduate program are the New York Eye and Ear Infirmary, Montefiore Hospital for Chronic Diseases, Mount Sinai Hospital, St. Luke's Hospital, Welfare Hospital for Chronic Diseases, and the New York Post-Graduate Medical School and Hospital with its Reconstruction and Stuyvesant Square Hospital units.

Opportunity is offered to the undergraduate students to study the

surgical treatment of orthopedic conditions at the New York Orthopaedic Dispensary and Hospital. The Neurological Division of Montefiore Hospital for Chronic Diseases is used for undergraduate instruction, and Morrisania Hospital provides facilities for additional obstetrical training. The Sea View Hospital, a unit of the New York City Department of Hospitals, offers further clinical facilities for teaching of tuberculosis. Lincoln, St. Luke's, St. Vincent's, and St. Mary's hospitals coöperate with the Department of Diseases of Children and the treatment of communicable diseases is given at Willard Parker Hospital. The teaching of medicine and surgery is supplemented by the coöperation of Roosevelt Hospital, the Research Division for Chronic Diseases, and the Mary Imogene Bassett Hospital in Cooperstown.

The Tuberculosis Service at Bellevue Hospital occupied its new pavilions early in 1939. The new building has 270 medical beds and forty-seven surgical beds. This building was especially designed and constructed to facilitate the work of the special service and is a thoroughly modern unit. There is included a fine teaching amphitheater, laboratories for study of respiratory and cardio-circulatory functions, a library, a series of especially designed units for the use of artificial pneumothorax and other collapse therapy, chemical and bacteriological laboratories, and an operating suite. The house staff has been increased to care for the enlarged service. This unit, valuable in the past, will be even more important in the future for the teaching program of the University.

Perhaps the most significant development in the graduate training program for the past year, which has been made possible by the generous financial assistance from the Josiah Macy Jr., Foundation, the Commonwealth Fund, and the Martha M. Hall Foundation, was the comparatively large number of young physicians participating in medical science training as a part of the residency experience. One hundred and fourteen residents in the affiliated hospitals took regular instruction in the medical sciences in the graduate laboratories of the School or were otherwise engaged in work toward the Doctor of Medical Science degree. In addition, a number of hospital residents received science instruction in the hospitals.

The residents are appointed by each individual hospital upon recommendation of the director of each service, as in the past. It is only after the appointments have been made that the Medical School recognizes

the recommendations of heads of the clinical services for the instruction of these appointees in part or all of the medical sciences regarded as essential to proper training in their respective fields. Not all the residents participate, as yet, in the basic science work provided in the Medical School. As the program evolves, an increasing number of the residents will be enrolled. Although the instructional program of graduate students is independent of that of undergraduate students, every effort is made to integrate the needs of both groups of students and to secure full coördination of the staffs of the clinical and scientific departments of the Medical School.

An effort is being made to adapt the advanced training in the medical sciences to the needs of the individual student and to regard the residents as graduate students in the university sense. They are placed largely upon their own responsibility for learning the subjects. Instruction is by means of individual work, conferences, laboratory experiments, reading of original articles, investigation of problems, and seminars. A number of clinical men on the staffs of the hospitals participate in the exercises and assist in laboratory instruction of their own and other residents from the various hospitals working in the same specialty field. Formalized and organized instruction is kept at a minimum, not only because the aim is to provide opportunities for learning at a graduate level, but also because the plan must be flexible if it is to meet the variable needs of each student. Very few individuals reach the residency level with identical preparation.

The arrangement of time in the different residencies, the proximity of the hospital to the Medical School, and the excellence of the laboratory facilities and personnel in each hospital have a bearing upon the program. No two services have the same arrangement and distribution of time, and, so far, not all of the services have included periods for instruction in the fundamental medical sciences in their residency patterns. Some services now require the residents to report ahead of the time of their appointment in order to obtain the instruction offered in the medical sciences. Other services believe that the most effective way of coördinating medical science instruction and clinical training is to offer certain blocks of time for laboratory investigation each year throughout the residency period. In several instances the medical science training is provided in the evenings for convenience.

In keeping with the policy as outlined in the original plan in 1932, a number of the residents taking basic science training who demonstrate special aptitude, preparation, and interest desire to become candidates for the degree of Doctor of Medical Science. Only residents appointed in one of the affiliated hospitals or those who have completed a satisfactory residency and wish to spend not less than a year in one of the medical sciences are eligible for registration for the degree.

A further expression of the changing needs of graduate training has been the reorganization of several of the hospital services. The Surgical Service of the Presbyterian Hospital has undergone such a reorganization. The essential change has been to place it entirely on a graduate basis, eliminating the surgical internship and making a mixed Medical Service of eighteen months a prerequisite for the surgical residency. Such a basic internship has been established at the Presbyterian Hospital in addition to the already established two-year medical internship. The Presbyterian Hospital now will provide for the continuous training of physicians, whether the objective of the young physician is general practice or one of the special fields. Similar changes have been made at St. Luke's Hospital and are being contemplated at other institutions. During the past year the School of Medicine has been able to assist affiliated and other hospitals in the formulation and execution of these plans of training for the members of their house staffs.

It is anticipated and hoped that as modifications in the house staffs of these affiliated institutions are effected, in keeping with the current trend toward a rounded educational experience for their residents, the facilities for graduate training at the Medical School will be further utilized.

# COMPARATIVE STATEMENT OF MED.SC.D. REGISTRANTS AND DIPLOMATES FROM DATE OF ESTABLISHMENT OF DEGREE

							77	Degrees
						E	nrollment	Awarded
1933-34		٠					27	19
1934-35							44	20
1935–36							54	16
1936–37							62	11
1937-38							55	15
1938–39							57	9

There has continued to be a progressive growth of interest in short courses offered to general practitioners and specialists. The crux of the matter here is the selection of individuals applying for these courses. An effort has been made to set up courses whose content could be offered to appropriate groups of interested practitioners and then to see that the members of those groups are selected. Gradually the number of technical courses has been reduced, so there is not the danger that formerly existed that short courses can be utilized in place of longer periods of training toward specialization. There has been a tendency, along with the trend toward eliminating duplication of course material, to add relatively few new courses and even to discontinue some that had previously been given. The number of registrants for short courses during the past year is shown in the following table:

Bellevue Hospital									72
Margaret Hague Maternity Hospital									19
Montefiore Hospital									
Mount Sinai Hospital									281
Medical Center									
New York Post-Graduate Medical Sch	ıool	and	ΗĿ	osp	ital				611
								_	
Total									1,184

The recent rapid developments in graduate medical education in the country and the numerous demands being made upon hospitals to provide various forms of advanced training force early and thoughtful consideration of how the hospitals can best contribute to those objectives. A satisfactory solution of the new problems will require readjustments in existing programs and the creation of some plan of coöperation between hospitals and medical schools.

The place of the teaching hospital in undergraduate medical training is well established. Practical bedside instruction was begun at the University of Leyden in 1630. Early in the eighteenth century Boerhaave developed this method on a high university level. Later his pupils became leaders in the hospital teaching programs in Paris, Edinburgh, and Vienna. When the first medical schools were organized in this country in Philadelphia, New York, and Boston the need for teaching hospital

facilities was recognized and provisions were made from the beginning. Modern clinical instruction of students is based on these early efforts.

It has long been recognized that the medical course could not provide practical experience and responsibility sufficient to equip the student to begin the independent practice of medicine. The internship was developed to meet that need, although it is frequently used as a convenient means of securing a house staff. Approximately 95 percent of graduates take an internship as a recognized part of their training. Twenty states require an internship for licensure, and thirteen medical schools have a similar requirement for graduation, although in most instances no educational supervision is provided. Opinion is rapidly developing that the intern period should become a part of the medical course proper and that supervision and direction of the hospital training should be a joint responsibility of the medical schools and those hospitals which provide or can arrange a satisfactory educational experience.

The intern period should be focused on the principles of internal medicine, pediatrics, and nonoperative surgery, which now constitute the major emphasis of the medical course, leaving advanced training in the specialties to the graduate field. This conception of the internship and its articulation with the undergraduate course will require extensive modification of the internship in many hospitals and affiliations with medical schools by those hospitals which are not now closely associated.

The training of a sufficient number of specialists to meet the needs of the country according to the standards of the American boards and the Advisory Board for Medical Specialties can be accomplished only by modifications in existing intern services and the development of new facilities and opportunities in the hospitals.

There is substantial agreement among all groups of specialists on the standards of training to be enforced after 1942. Experience has shown that a program of graduate teaching tends to improve the quality of medical care in the hospital. The stimulus of teaching activities, the encouragement of research, the increased interest in staff conferences, the fuller development and use of the library, laboratories, x-ray and clinical facilities for instruction, the increase in the opportunities for younger members of the staff to participate in teaching, the presence on the house staff of

mature graduate students who have had previous hospital experience, the improvement of patients' records, and in the nursing, dietetic, and other services, and the attraction of superior graduates from the best medical schools contribute considerably to elevate the professional care of patients. Satisfactory plans of graduate teaching can be carried out, however, only in those institutions in which the hospital services are properly organized, the staff competent to provide real instruction and willing to organize themselves and take the responsibility for teaching, and in which the hospital administration encourages instruction. The program should include close coöperation of the hospitals and medical schools to provide preparation in the medical sciences related to the specialities, as well as adequate supervised clinical training.

The relationship of medical to general education can be visualized only in the light of the objectives to be sought. The diagnosis and treatment of diseases and patients (there is a real distinction) have become enormously complex because of the many recent advances in scientific knowledge and technical skills. They require that physicians be prepared and trained in a variety of different fields. Conditions of living today contribute to illness and incapacity to a much greater degree than they did in the past. Every physician should be prepared to understand the social, environmental, and emotional elements in the health of the individual and his family and to deal intelligently with these factors, which are responsible for a large segment of present-day medical practice. In addition to the scientific advances and the influence of environmental conditions upon health there is an awakening sense of responsibility on the part of the public and the profession that modern medical care should be provided to every group of the population, economic as well as geographic.

The newer developments require that medical services be articulated with broad social and economic trends, which in turn suggests that education for medicine emphasize more than it has in the past the functions of medical care in modern society. The many phases of medicine demand a variety of different kinds of personnel and variations in training to equip them for the numerous aspects of the health program. If medical education is to meet its responsibilities fully it must be conceived in relation to a wide range of social, economic, and psychological factors as well as the

commonly accepted scientific factors with which the physician must deal. Only by proper coördination with previous education can the medical training fully meet its responsibility in the preparation of physicians.

The increasing length of training is inseparably associated with the growing demands made upon the profession. This feature is receiving fresh emphasis because of the requirements for graduate training for the clinical specialties beginning in 1942 mentioned earlier. Many graduates now take three to five years or longer before starting independent practice. It is generally agreed that the responsibilities of real specialists require that amount of preparation in the public interest.

Several suggestions designed to allow students to complete their formal education earlier have been made. The mean age at which physicians graduate is higher than in most other countries, although it has not increased in recent years. The lengthening periods of hospital experience, however, are elevating further the age at which the young physician begins practice. This is due in part to present economic conditions and the overcrowding of the profession, which makes a start in practice increasingly difficult, with the result that many recent graduates remain in hospital services rather than venture into practice.

One suggestion is to shorten the medical course. The total content cannot be given in less time with safety. A few schools have speeded up the schedule by providing instruction for the full calendar year, thus permitting students to meet the total required hours of instruction in three instead of four years. Some doubt may be expressed as to the wisdom of condensing the basic course. Experience has shown that the best students desire to take extra work in the present four-year program. Time is a necessary element in the maturation of every student. If condensation of schedules is to be proposed it would be better to put it into effect elsewhere than in the period of basic professional training which forms the foundation for the physician's entire career. It must be borne in mind that the medical course is shorter in the United States than in any other country where medical education is regarded as satisfactory. Compromise with sound standards is unwise and unnecessary. On the other hand, the prolongation of professional training beyond a reasonable length has the danger of stifling creative ability, enthusiasm, and intellectual independence, a hazard now recognized in some of the graduate requirements.

Another suggestion is to reduce the period of college education preceding medical studies. An extreme proposal which is not likely to receive serious attention is that the college period should be eliminated and that medical students be admitted directly from secondary schools. This plan was in existence a generation ago in this country and was abandoned in the evolution of present-day standards of medical education. With the ratio of doctors to the population higher than in any other country in the world, there is no pressure from the public aspects of the question on this point, although the distribution of doctors and other national considerations of medical care do demand solution.

Without discussing the somewhat anomalous position of the American college in the scheme of education, it is worthy of note that the enrollment in institutions of higher education has increased about 1,100 percent in the last forty years, during which period the population has approximately doubled. There are now three times as many students in these institutions as there were in the secondary schools at the turn of the century. A college education has now become the accepted desirable base for general education and for professional or advanced training. If the physician is to continue to be the health leader and adviser in his community he must have as broad a general education as his associates in other community activities. In view of these considerations and of the thousands of applicants for admission to medical schools each year who have a college preparation, the medical schools will probably continue to admit only those whom they believe to have the most satisfactory qualifications and preparation.

The answer is not the elimination of the basic college period, but an improvement in its objectives and effectiveness. It is recognized that many of the defects in this segment of education are traceable to the inadequacies of secondary education which too often fails to equip pupils with the sound rudiments of education and continues to consume a longer time than necessary. The first year or two of college is often devoted to instruction at a secondary school level. The reorganization of some courses and the stimulation of better scholarship would help materially to bring students to the professional schools earlier and better prepared. Efforts in these directions are being made, and the evolution of higher education will be a gradual process.

The content of college preparation for medical studies has evoked much discussion. The opinion is growing that the college preparation should be general in character, not preprofessional. Because of the factors in medical care, research, teaching, graduate education, and public relations to which reference was made earlier, many schools now select students on the basis of their individual and personal qualifications rather than on the basis of the subjects taken and the length of preparation. It is far more important from the standpoint of the public, the profession, and the individual that the prospective medical student shall have shown evidence of the character, personality, native ability, industry, and resourcefulness and shall have the broad cultural interests and background necessary in a successful physician than that he shall have completed a college training or shall present an impressive array of science subjects.

The considerable dependence of medical training upon physics, biology, and particularly chemistry is not open to much debate. Satisfactory courses in these subjects provide the elementary tools of objective and quantitative study and help to equip the student in accurate thinking, observation, and critical judgment. They serve as an introduction to scientific methods and thought, but can be, and in some instances have been, overemphasized in the attempt to standardize preparation. The aptitudes, interests, and abilities of individual students and evidence of high intellectual capacity are more vital than subject matter.

The motivation in the preliminary sciences is as important as the length and content of college preparation. Much of the science teaching is presented from the viewpoint of the special interests of the teacher or department. Teachers in inorganic chemistry are likely to emphasize its commercial applications. Those in organic chemistry stress the dyes and similar industrial uses. Equally valuable material for the illustration of underlying principles and the demonstration of methods can be found in the fields of nutrition and biology, as examples. Physics is taught in many places largely in relation to engineering. Biology, too frequently, is presented as topics in classification, of interest to the specialist in that field, rather than as a subject dealing with the life processes of cells and simpler organisms. These subjects often are arranged not for the needs of either general education or particular preparation for medicine, but as preliminaries for more advanced work in the separate sciences or in other voca-

tions. In many instances the attempt is made to teach too much in too great detail and in too specialized a manner. The aim should be to provide students with a grasp of the fundamental principles and methods of the basic sciences rather than with a mass of information and technical procedures so often taught by "cook book" methods. The laboratory is used too much as a training in manipulation rather than as a means of illuminating and illustrating subject matter. It is not more, but a different type of science teaching that is required for purposes of both general education and the preparation for medical studies.

One general comment can be made. A common characteristic of college graduates is their lack of intellectual self-reliance. Many have difficulty in adjusting themselves to the serious demands of professional training and cannot readily take the responsibility for their own self-education. Increasingly, the medical schools are placing emphasis on learning by the student rather than on teaching by the faculty. This attitude is particularly clear in graduate medical education and has permeated to a considerable extent the clinical instruction of the medical course proper.

In an effort to deal on a national basis with the problem of medical education as a whole and to coördinate the efforts of the many agencies now regulating that field, an Advisory Council on Medical Education was created in June. It is the first agency in the country for this purpose which is representative of the various groups directly concerned with the problems of education and licensure of physicians. The council comprises thirteen national organizations representing the colleges, universities, medical schools, licensing bodies, hospitals, and professional bodies. Through a coöperative representative agency of this type it is hoped that a better appreciation of the interdependence of the different phases of medical education can be obtained on the part of college, medical school, hospital, licensing and professional bodies, and, also, that emphasis will be placed on true educational standards rather than on standardization and the multiple, overlapping, and conflicting regulations which are the cause of considerable confusion at present.

During the winter the Dean made a study of graduate medical education in Great Britain for the national Commission on Graduate Medical Education and attended the annual session of the Council on Medical Education and Registration of the United Kingdom. The interchange of

ideas on graduate and undergraduate instruction proved most stimulating. Significant changes in medical care for the population of the British Isles are quietly proceeding. These changes are of considerable interest because of the active movement in this country to secure greater government participation in medical, hospital, dental, nursing, and public-health fields. Another subject of study was the nonuniversity medical schools in Scotland which have been providing instruction recognized in this country for many American students who have not been admitted to approved medical schools here. This practice has been stopped by the New York State Board of Medical Examiners, the National Board of Medical Examiners, and certain other state boards.

Great interest has been aroused in scientific circles by the development of a new method of analysis of minute quantities of protein substances by means of electrophoresis. The apparatus was originally designed in 1930 by Professor Arne Tiselius, of the Psychico-Chemical Institute of the University of Upsala, Sweden. It has recently been greatly improved and simplified and can now be constructed for practical use in diagnostic and research efforts. This electrophoretic apparatus is a system of cells immersed in a constant-temperature bath in which temperature and electric currents can be accurately controlled, and an optical system operates through the central mechanism. It is an important supplement to the ultra-centrifuge which is now in use here to isolate protein substances by gravimetric methods, whereas the Tiselius apparatus separates the same molecules electrophoretically.

Studies of this kind are particularly valuable in the isolation of hormones and antihormones in infinitesimal amounts in the blood and other body fluids. The apparatus is of great value in the study of blood serum in photo-oxidation of antigens and antibodies in making tests on various globulin components in antigens and antibodies which have important bearing on studies in pneumonia, other acute infections, and similar inquiries. It is believed that the Tiselius apparatus can be used in the study of bacterial proteins and in certain phases of immunology as well. The men in the Department of Physiology feel that it would be important in studying the question of blood volume, extracellular fluids, and similar changes in the body which can only be measured by such a delicate instru-

ment. There is a possibility that it may be useful in helping to identify chemical changes in malignancy.

The Josiah Macy, Jr., Foundation, the Rockefeller Foundation, and an anonymous donor have made it possible for the University to install this electrophoretic apparatus.

Detailed reports of the teaching and research activities of the various departments follow.

#### DEPARTMENT OF ANATOMY

Professor Samuel R. Detwiler, Executive Officer

The course in gross anatomy has been strengthened by new additions to the teaching staff. Dr. Raymond C. Truex, of the University of Minnesota, and Mr. Sherwood L. Washburn have been appointed as full-time Instructors. Mr. Roger Crafts has also been appointed as graduate assistant. The sessions on the brain and nervous system during the latter part of the fall term under the supervision of Professor Samuel R. Detwiler have proven to be a very valuable addition to the course.

It is gratifying to report that in connection with the program of graduate medicine, eighty-four residents from various New York hospitals have received instruction in the Department since the beginning of the present academic year. Instruction has been confined largely to those specializing in the fields of otolaryngology, ophthalmology, and orthopedic surgery.

Professor Philip E. Smith has been president of the Harvey Society of New York and was elected a member of the National Academy of Sciences. Professors Smith and Earl T. Engle have continued their investigations in experi-

mental endocrinology and in the physiology of reproduction.

The establishment and development of the Santiago Island primate colony, in coöperation with the School of Tropical Medicine, is a promising venture. Professor C. Raymond Carpenter purchased 400 rhesus monkeys in the Straits Settlements and in India. Since his return he has been in residence in Puerto Rico, devoting himself to nutritional and behavior problems in monkeys and apes.

Professor Aura E. Severinghaus, with Dr. James A. Chiles, Jr., has equipped the ultra-centrifuge with a very sensitive Toepler's schlieren system, which allows the observance and photography of molecular boundaries in colorless liquids during molecular sedimentation. With Professor Kenneth Thompson, of Yale University, Professor Severinghaus has completed a study of alterations of the cytology of the anterior hypophysis associated with the elaboration of antihormones. Dr. Louis Levin has been analyzing blood chemical changes in hypophysectomized monkeys. Dr. Sidney Werner, of the Depart-

ment of Practice of Medicine, has continued investigations in experimental endocrinology. Dr. Charles L. Buxton, of the Department of Obstetrics and Gynecology, has been engaged in making an evaluation of pregnandiol excretion with especial reference to sterility.

Dr. Ulrich Westphal, of the Kaiser-Wilhelm Institut für Biochemie, a Fellow of the Rockefeller Foundation, has been working on gonadotropic hormones. Dr. James L. Leathem has been studying the differential activity of gonadotropic hormones. Dr. Theodora N. Salmon, of Hunter College, has continued her investigations on the effects of thyroparathyroidectomy, in collaboration with Dr. Daniel Ziskin, of the School of Dental and Oral Surgery.

Professor Dudley J. Morton has continued the clinical application of his studies on the foot with the publication of a popular book and various articles. His publications dealing with static foot disorders have continued to arouse an increasing interest among medical men whose societies in various parts of the country have called upon Dr. Morton for lectures.

Professor William M. Rogers and Dr. Harry H. Shapiro have completed a series of experiments analyzing the factors influencing the shedding of deciduous teeth. Professor Rogers and Mr. Horace O. Parrack, of the Department of Physiology, are investigating the influence of age on functional survival of severed mammalian nerves. In the field of experimental neuroembryology Professor Rogers is completing a study of the development of spinal reflex patterns and of nerve-muscle specificity.

Professor Raymund L. Zwemer is working on factors affecting human potassium tolerance, a subject of increasing interest among clinicians. In connection with this work he and Mr. Oliver Straus have developed a new, more accurate hematocrit for determining red blood-cell volume. The relation of potassium to nervous disorders is being studied with Professor Frank H. Pike, of the Department of Physiology. With Dr. Francis Chamberlain and Dr. John Scudder a reversal of the K effect on the electrocardiogram by sodium chloride solution or adrenal cortex extract has been investigated.

Professor Wilfred M. Copenhaver has recently completed a study on the growth and function of hearts when transplanted between different species of amphibia.

Professor Samuel R. Detwiler and his students are continuing studies in experimental neuroembryology with particular reference to the developmental physiology of the central and peripheral nervous system. Joint studies are being made to investigate possible causes of abnormalities during development. In this work the effects of treatment of embryos with indolbutyric acid, low oxygen, and high carbon dioxide are being tested. Dr. Ruth Miller is continuing her work in comparative morphology with particular reference to the primates. Dr. Raymond C. Truex is studying structural changes and degeneration of nerve cells of the human gasserian ganglion associated with advancing age.

### DEPARTMENT OF BACTERIOLOGY

Professor Frederick P. Gay, Executive Officer

Instruction given by the Department during the first trimester to medical and dental students has proceeded along the same lines as in previous years. The increasing emphasis that should be placed on experimental problems makes it desirable to suggest for the future that important phases of the work covered by the elective course be absorbed by the main laboratory course. It remains to be seen how this can be accomplished without overloading the required instruction. Among the special courses offered during the second trimester, the lecture and laboratory course in parasitology by Professor James T. Culbertson continues to attract a sizeable class of both medical and non-medical students.

Instruction and opportunity for research have profited immeasurably from the added space and the improved facilities on floor K. This is reflected by the increasing number of graduate and special students that seek admission to the Department. During the past year the Department had enrolled five candidates for the degree of Doctor of Medical Science, fourteen students who were registered as Ph.D. candidates, and four students working for their A.M. degrees. In addition, three nonmedical students from other departments had registered in medical bacteriology.

During the past year the diagnostic laboratory performed a total of 59,136 tests, an increase of 7,513 over the preceding year. The bacteriological and serological service for the Neurological Institute, which was absorbed in its entirety in October, 1938, accounts for about half of this increase; additional serological work has also come from the Babies Hospital under last year's arrangement.

The appointment of Dr. H. M. Rose on December 1, 1938, as resident in bacteriology has filled a long-felt need for a competent bacteriologist with medical training who understands the requirements of the clinicians and who is in a position to act as an effective liaison officer between the laboratory and the various hospital units.

The past year was extraordinarily fertile in research activities. No less than thirty-one papers were published from the Department covering a wide range of topics in the fields of bacteriology, immunology, and related sciences. Professor Frederick P. Gay, in collaboration with Dr. Ada R. Clark and several graduate students, has continued his studies on the mode of action of sulfanilamide and similar compounds on hemolytic streptococcus infections. Professor Gay has also become very much interested in the philosophical and historical aspects of the natural sciences and has contributed two papers, one on medical logic and the other on the history of bacteriology at Columbia University.

Professor Claus W. Jungeblut has carried further his studies on the rela-

tion of vitamin C to the pathogenesis of certain infectious diseases, particularly poliomyelitis and diphtheria. This work has now reached a point where it is necessary for epidemiological and clinical observations to complement the laboratory data.

A great deal of energy was spent by Professor Culbertson, in conjunction with some graduate students, in carrying through an experimental approach to the mechanism of natural resistance in laboratory animals against protozoan infections, especially the various forms of trypanosomes. This work, the ramifications of which were spread over the last two or three years, has now come to completion and has yielded a series of significant papers on this important subject. Professor Culbertson and Dr. Rose have also published data concerning a new skin reaction in patients suffering from hydatid disease, which promises to become of great diagnostic value.

Dr. M. Maxim Steinbach and his group of graduate students have completed their studies on the effect of sulfanilamide and vitamin C in experimental tuberculosis and are now actively engaged in an investigation of the effect of experimental diabetes on tuberculosis in laboratory animals. This work is being generously supported by grants from the National Tuberculosis Association. Professor Beatrice C. Seegal is occupied with a continuation of her studies on the damage produced by specific cytolytic sera in the organs of rats, as well as with further investigations of phenomena of local sensitization.

Studies on herpes virus and the viruses of human and horse encephalitis, subsidized by the Matheson Commission, were carried on by Dr. Margaret Holden and Miss Eleanor Molloy. Their findings were published in a paper which has outstanding significance in connection with the problems of the possible etiological relationship between some cases of human encephalitis and equine encephalomyelitis. Professor Theodor Rosebury, with his assistants, is still greatly interested in the study of experimental Vincent's infection and the cultivation of the fusospirochetal flora. The group of pleuropneumonia-like organisms that figure so prominently in current research here and abroad has formed the subject of study for Mr. Joel Warren. The relationship of porphyrin derivatives to bacterial growth, especially M. tuberculosis, was investigated by a group of workers under Dr. Sylvester Daly. Drs. Thomas P. Shearer and Ralph C. Yeaw completed a study of the growth of bacteria in urine in relation to pH. New methods of tissue cultivation that promise to be significant for the growth of filterable viruses in general have been applied by Dr. Murray Sanders to the cultivation of the lymphogranuloma virus. This work would have been impossible without the active coöperation of Professor J. Gardner Hopkins, from the Department of Dermatology.

Professor Richard Thompson has continued his measurements of lysozyme in tears, particularly in relation to vitamin A deficiency. He and Dr. Devorah Locatcher-Khorazo have also carried on their studies of the antigenic groups

of staphylococci. Professor Rhoda W. Benham has nearly completed her studies on the cultivation and classification by serological methods of various forms of fungi. Dr. Helen P. Beale, associated with the Boyce Thompson Institute, is still continuing her important study of different plant viruses.

#### DEPARTMENT OF BIOLOGICAL CHEMISTRY

Professor Hans T. Clarke, Executive Officer

The Department has lost an important member in Professor Crawford F. Failey, who has resigned in order to devote his entire time to nonacademic duties. Another valued member of the Department, Dr. Robert M. Herbst, who for the last eight years has efficiently filled the position of Instructor, leaves in September to take up an appointment as Assistant Professor in the Department of Chemistry at New York University. His place is to be taken by a graduate of the Department, Dr. Marianna M. Richards.

The teaching methods of the Department remain essentially unchanged; during the past year careful thought has been devoted to the correlation of the subject matter with that taught by the Department of Physiology. Twelve graduate students attended the introductory course given to medical students, and twelve other graduate students took advanced courses. Laboratory facilities have been provided for three visiting scholars supported by foundation fellowships, as well as for fourteen research workers other than members of the Department.

The Department has continued to be responsible for the diagnostic chemical work for various units in the Medical Center. The total number of analyses performed yearly has continued to increase, and the nature of the analytical procedures has become more diversified.

Professor Edgar G. Miller has continued work on problems related to the physiology of sterility and fertility, in coöperation with members of the Department of Obstetrics and Gynecology, and has continued investigations on the chemistry of connective tissue. Professor Goodwin L. Foster has continued his collaboration in the biochemical investigations involving isotopes, and has undertaken a study of the pigments of the fungus Eidanella. Professor Oskar Wintersteiner has continued his studies on the chemical transformations of natural estrogens. He has also studied the properties of certain bile acids and has prepared a comprehensive review of the chemistry of the corpus luteum hormone and related substances for the *Ergebnisse der Vitamin-und Hormonforschung*.

Professor Rudolf Schoenheimer and his group have developed the application of the isotopes of nitrogen and hydrogen to problems of intermediary metabolism, with especial emphasis on the chemical activity of the body constituents in normal animals. In collaboration with Dr. DeWitt Stetten and Dr. Karl Bernhard he has been studying the interversions of fatty acids in

animals. The work with the heavy nitrogen isotope indicates that analogous and extremely rapid general chemical activity occurs spontaneously in the body proteins. In collaboration with Dr. Michael Heidelberger it has been found that such chemical reactions take place even with antibodies. With the aid of heavy nitrogen it has been found possible to throw much light on the interrelationship of creatine and creatinine, and on the formation of these substances in the body. The entire study involving the biochemical application of isotopes has been made possible by a generous five-year appropriation by the Rockefeller Foundation, with additional support from the Josiah Macy, Jr., Foundation.

Dr. Robert M. Herbst has continued his studies on the condensation of amides with keto acids and on the mechanism of the exchange of nitrogen during the interaction of amino acids with keto acids. Dr. Marianne Goettsch, in collaboration with Professor Alwin M. Pappenheimer, has shown that not only the brain disease of young chicks, but the nutritional muscular dystrophy of rats and guinea pigs may be prevented by the administration of pure vitamin E.

Professor Warren M. Sperry has taken over the direction of the Chemical Division of the New York State Psychiatric Institute, but maintains his association with the Department. Professor Erwin Brand, who is now engaged in full-time research in the Department, has continued, in coöperation with Professor George F. Cahill, of the Department of Urology, and Professor Leslie C. Dunn, of the Department of Zoölogy, an attempt to produce hereditary cystinuria in a strain of Irish terriers. A standard, genetically uniform breed of dogs is being obtained as a by-product, which may be of value for many scientific purposes.

Professor Erwin Chargaff has continued his work on blood coagulation and has also extended his investigations of liver proteins to include the use of radioactive phosphorus. Dr. Hugh H. Darby has carried on a study of the male and female hormones in the urine of patients suffering from various endocrine disturbances. He has also, in collaboration with Professor Hans T. Clarke, continued his investigation of the vitamin D content of marine algae. Dr. Abraham Mazur, under Professor Clarke's guidance, has continued his investigation of the proteins and lipins of rudimentary organisms; this study, made possible by a grant from the Carnegie Corporation, has been carried on in collaboration with members of the Department of Zoölogy of Harvard University.

### DE LAMAR INSTITUTE OF PUBLIC HEALTH

Professor Haven Emerson, Executive Officer

The number and quality of applicants for graduate instruction have exceeded those of previous years. By selection of those with superior qualifications the

class, though of increased size, has been of better average material than its predecessors.

The staff and students have been at considerable inconvenience because of the necessity of using temporary quarters in the old Vanderbilt Clinic building. Limitation of city funds for the Washington Heights Health Center building has prevented the installation of certain essential equipment needed in the next academic year, and failure so far to obtain support for the minimum essential budget to conduct the teaching and research on a desirable scale next year has handicapped plans for the Health Center and the selection of personnel. However, the usefulness and competence of the staff in their various fields of preventive medicine are increasingly recognized, as illustrated by the broadening scope of public consultant, advisory, and research activities in which they have become involved. The Faculty of Medicine has increased the time allowed in the third year for practical training in the public aspects of preventive medicine in order to strengthen teaching in this important field.

There are several applicants for candidacy for the degree of Doctor of Medical Science in public health as authorized by the Trustees in 1938, and at the proper time these will be presented for consideration by the appropriate committee of the Faculty of Medicine. There remains to be found an academic formula of qualifications suitable for nonmedical candidates for degrees in the field of public health higher than that of the Master of Science now offered to them. The confusion and embarrassment arising out of the multiplicity and variation in the qualifications and designation of graduate degrees in public health now prevailing in a dozen or more universities and colleges in the United States may be resolved by a conference which it is proposed to hold within the next few months under the auspices of the American Public Health Association.

It is expected that the new Health Center will be ready for occupancy in the autumn, at which time all of the activities, personnel, and offices of the DeLamar Institute, except certain of the research projects now well equipped at 60th Street and Amsterdam Avenue, will move from their present scattered quarters into the fifth, sixth, and seventh floors of the new unit.

In view of the increasing demand of graduate students in public health for broad basic and specialized training in a steadily expanding vocational field, and because of the rivalry and proper academic competition of other schools of public health, the Department urges that a person of at least assistant professorial grade be appointed to develop and present the subject of child hygiene. The Department needs help in the clinical as well as in the laboratory and epidemiological and public health aspects of human parasitology and of certain of the communicable diseases of the tropics.

At present there is no person in the field of educational psychology and educational methods to develop and present the principles of health education.

It would strengthen the Department in prestige and productiveness if several fellowships were provided to assist more promising graduates in public health and other equally qualified workers to continue for a year or two in research projects in the Department.

Seminars were held once a week, and all candidates for the degree of Master of Science in public health were required to attend. Among the outside contributors to these seminars were: Dr. W. A. Sawyer, of the Rockefeller Foundation; Dr. George McCoy, of the Louisiana State University; Dr. George H. Ramsay, Commissioner of Health of Westchester County; Dr. Herbert Rosenthal, Dr. John Oberwager, and Mr. Thomas J. Duffield, of the New York City Department of Health; Dr. Gustavo Fricke, of Chile; Dr. Hercus, of New Zealand; Dr. Charles E. North, consultant in sanitary engineering; and Dr. Bion R. East, a research student in dentistry and nutrition.

An optional concentrated course in New York State public-health law, the Sanitary Code, and the *Laboratory Manual* was given to seventy of the fourth year students wishing to qualify for positions as Grade II health officers in New York State.

A class of twenty-three students was admitted in September, 1938, to the courses leading to the degree of Master of Science in public health, some on a one-year and some on a two-year schedule. Of the twenty-three new students, eighteen are physicians, one is a dentist, and four are nonmedical.

A word of appreciation must be included in this report to record the valued coöperation of Professor H. C. Sherman who continues to carry the major burden of the course on the public health aspects of disturbances and diseases of nutrition, offered among the required courses for the degree of Master of Science in public health.

A course of sixty hours in public health and preventable diseases was offered to twenty-five dentists engaged in the New York City Department of Health or other dental clinic service. This course was given at the request of the New York City Department of Health. At the request of the New Jersey State Teachers College at Newark an extension course in preventable diseases and public health practice was given by the Professor of Public Health Practice.

A considerable number of lectures on public health topics were given before professional and lay audiences, as part of the obligation of the staff to share in health education and promotion. A great deal of time and attention has been demanded by medical and lay audiences for consideration of the problems involved in the Federal proposals for an expanded program of health and medical care.

Dr. Bion R. East has been appointed Research Associate in Sanitary Science, under a fellowship grant by the National Oil Company. Dr. East has

long been interested in the relation of diet, and especially of vitamin D, to dental caries.

The chief research project has been studies in air bacteriology generously supported by the John B. Pierce Foundation. Specifically we are now investigating the longevity and stability of certain strains of Beta hemolytic streptococci, under various conditions of exposure in the air or after having settled to the floor of an experimental chamber.

The course in biostatistics has been continued and materially strengthened by the return of Miss Elsie Dochterman to the teaching staff. Miss Dochterman had been granted a year's leave from her duties in epidemiology to enable her to take advanced studies at Johns Hopkins University in order to prepare for this work.

Professor Earle B. Phelps has continued to serve as chairman of the Joint Committee of the American Public Health Association dealing with atmospheric hygiene and ventilation standards and likewise represents the American Public Health Association and the American Medical Association on a joint committee for the same purpose under the auspices of the American Standards Association. He is a consultant to the United States, Massachusetts, and New York State public health services in stream pollution. During the past year a number of studies were made in the field of disinfection, including work on the effect of dilution on disinfectants and the germicidal properties of vitamin C.

A study is being made with a grant from the Grade A Milk Producers Association, of the comparative flora of Grades A and B milk. A staff consisting of three bacteriologists and two part-time helpers has been added for the bacteriological work.

Among the relations with industry and government in the field of industrial hygiene have been the following: advising the subway contractors on methods of keeping their dust down to safe limits; testing, several times a month, the carbon-monoxide contents of the air after blasting, to insure that the health of the men in subway construction work will not be endangered; assisting the medical department of the city subway in protecting the health of their regular employees; investigating, at the request of the International Business Machines Company, the possible hazard to office workers in the use of solvents necessary in the operation of their transfer posting machine; studying, at the request of the Boyce Thompson Institute, the possible danger to the general public from the use of thiourea to prevent peroxidase reactions on sliced fruits and vegetables.

An extensive study of the effect of aniline and acetanilid in producing methemoglobin when taken daily over a period of weeks has been undertaken, including study of human subjects as well as animals. The physiologic reactions are being studied with Dr. Pike, of the Department of Physiology,

and Dr. Zwemer, of the Department of Anatomy. Several hospitals in New York City have been assisted in cases of radium poisoning.

Dr. Frederick H. Shillito has been promoted from Instructor to Assistant Professor of Industrial Hygiene. His interests continue in the clinical aspects of industrial medicine. He has conducted a survey locally in respect to the possible deleterious effects of ink solvents in a printing plant. He has also continued direction of the laboratory and clinical investigations of the medical program of the Hercules Powder Company.

The Division of Epidemiology has participated in studies in coöperation with the official public health agencies. Professor Albert V. Hardy, sponsored jointly by the Division of Infectious Diseases of the National Institute of Health, the Indian Medical Service, and the DeLamar Institute of Public Health, has continued to direct the investigation of the diarrheal diseases. A three-year field study in New Mexico has been completed, and the laboratory has been moved to Albany, Georgia, where a similar investigation will be conducted. In New York City, the Department of Health is joining with the DeLamar Institute in a comparable study which will be initiated soon.

While these studies have given an opportunity for productive investigation, facilities have not been provided which would permit the development of a division of epidemiology within the Institute and University which would have independent strength. Funds are needed for at least two research associates and to cover the cost of such field and laboratory studies as might independently be selected.

### DEPARTMENT OF DERMATOLOGY

Professor J. Gardner Hopkins, Executive Officer

Two new courses have been given this year for graduate students and junior members of the Department, one by Professor Paul Gross on the principles of dermatology and one by Dr. Gerald F. Machacek on histopathology of the skin. The Journal Club has been reorganized as an aid in graduate instruction. Weekly staff meetings for the presentation of patients, the study of histological specimens, and discussion of current dermatological topics function in a similar way. In graduate training, however, emphasis is laid on practical work in the clinic and experimental work in the laboratory rather than on formal courses.

A service of fifty beds for diseases of the skin will be opened on July 1 at the Welfare Island Hospital for Chronic Diseases. It will be available for students from the College of Physicians and Surgeons and from the New York Post-Graduate Medical School and will help to fill the urgent need of hospital beds for teaching purposes. Professor Lewis B. Robinson will be in charge of the service.

The Health Center at 168th Street and Broadway will refer all cases of

syphilis to the Vanderbilt Clinic for treatment. It is expected that this will furnish material much needed for clinical instruction.

Dr. Murray Sanders has succeeded in propagating the virus of lymphogranuloma venereum in tissue culture. His method opens the way for the preparation of an improved antigen for clinical diagnosis and for the study of immunity to this disease. Professor Rhoda W. Benham has demonstrated that the Pityrosporon ovale requires certain fats or fatty acids as a growth factor and she has succeeded in cultivating this fungus.

Professor Beatrice M. Kesten, in collaboration with Dr. Cornelius J. Kraissl and Mr. Richard Cimiotti, of the Department of Surgery, has published a study of sensitization to catgut, which causes in experimental guinea pigs a breakdown in laparotomy wounds sutured with this material, a phenomenon

which seems to explain certain postoperative accidents.

Professor Paul Gross, who has been engaged in a study of the relationship of vitamin B to various dermatoses of man, has begun a correlated study of the skin lesions in rats caused by deficiency in different elements of this vitamin B complex. Professor A. Benson Cannon has published a series of articles on the treatment of syphilis based on the methods which he has developed at the Vanderbilt Clinic.

### DEPARTMENT OF DISEASES OF CHILDREN

Professor Rustin McIntosh, Executive Officer

Professor Herbert B. Wilcox was granted leave of absence from April 15, 1939, to the end of the academic year. His withdrawal from active participation in the work of this department, in the building up of which he has had so vast an influence, is greatly regretted. Dr. Robert W. Culbert, who has been on leave of absence since August, 1938, during which time he has participated in the child health activities of the New York City Department of Health, will retain his appointment as Associate in the Department in order to facilitate coöperation in the teaching of health activities.

There have been no significant changes in the teaching in the past year. Owing to Dr. George B. Bader's resignation from the pediatric service at St. Vincent's Hospital, the elective course there was discontinued in October, 1938; fortunately, through the kind coöperation of Dr. Samuel Karelitz, Professor Bela Schick, and others at Mount Sinai Hospital, a new elective course was made available to third year students in January, 1939, which has helped meet a pressing demand on the part of students for clinical contacts.

The publications from the Department during the past academic year number thirty-four, including twelve from the Normal Child Development Study. In spite of the increase in the number of published papers, Professor McIntosh is of the opinion that the studies reported are of qualitative and descriptive products rather than investigative and quantitative work. There is a serious

shortage of laboratory space. Even with the small quarters, there is a constantly pressing threat from necessary expansion of facilities for routine laboratory work at the expense of what little remains for research. Through the kindness of Professor James W. Jobling, we have recently been permitted to borrow space on floor L of the School for some of Dr. Hattie E. Alexander's studies of infection by virulent strains of H. influenzae and their prevention with antisera of her own designing. While it has been a great help to overflow into the School in this respect, the practicability of this solution is limited not only by the uncertainty as to the continuing availability of space, but also by the relatively small number of problems that can be moved out of the Babies Hospital laboratories without serious loss of efficiency.

Dr. Alexander's work continues to offer great promise. While it takes considerable time to build up a significant experience in the treatment of B. influenzae meningitis, owing to the relative rarity of this disease, and while it is entirely premature to claim that a therapeutic armamentarium comparable to that of diphtheria antitoxin for the treatment of diphtheria infections has been obtained, it is fair to state that the results are very promising. The studies of serum treatment of pneumococcus infections, undertaken by Dr. Alexander and Dr. Howard R. Craig with support from the Borden gift, took a sudden shift of direction when sulfapyridine became available. This phase of the study, carried out by Dr. Gilbert M. Jorgensen and Dr. Henry S. Christian, resulted in an unprecedentedly low mortality rate of 1 percent for more than one hundred consecutive cases of pneumococcus pneumonia. Because of the possibility that pneumococcus infections in this particular year may have been unusually mild, this astounding experience must await confirmation before the value of sulfapyridine can be accepted by this preliminary standard.

Professor Beryl H. Paige, in collaboration with Professor Abner Wolf and Dr. David Cowen, has made an important contribution to the significance of toxoplasma infections in man. Dr. Dorothy H. Andersen has pursued her studies of enzyme activity in the duodenal contents of infants and children under various clinical conditions.

Professor A. Ashley Weech and his associates are pursuing their studies of the regeneration of plasma proteins along systematically planned lines of investigation. It is a matter of great satisfaction that Professor Weech was asked to give one of the Harvey Lectures last November; his subject was "The Significance of the Albumin Fraction of Serum."

Professor John D. Lyttle and Dr. Elvira Goettsch have collaborated on a study of the qualitative changes in the plasma proteins in a variety of clinical conditions. Professor Lyttle's investigations of the pathogenesis of nephritis, nephrosis, and other renal disturbances of childhood continue. Professor Donovan J. McCune has completed a study of the effect on hemoglobin and red cell count of the early addition of iron to the diet of young infants; this study has been generously supported by the Borden Company. Together with

Professor Howard H. Mason and Professor Hans T. Clarke, of the Department of Biological Chemistry, Dr. Donovan has made an intensive and highly significant study of metabolic disturbances involved in certain peculiar forms of rickets.

Dr. Katharine K. Merritt and Dr. Leonard T. Davidson, with assistance from generous gifts from a number of friends of the Babies Hospital, have commenced a study of bilirubinemia and the pathogenesis of jaundice in newborn infants. Dr. Hilde Bruch continues her studies on obesity in childhood, with generous support from the Josiah Macy, Jr., Foundation. Her most recent line of investigation has to do with the psychological aspects, not only of the obese child, but of his parents' attitudes on the subjects of nutrition, growth, and body weight, out of which is emerging a highly interesting contribution to psychosomatic medicine.

The assignment of Professor A. Ashley Weech to the directorship of the Normal Child Development Study, vice Professor Herbert B. Wilcox, permits the work of this division to be carried on without interruption. Professor Weech's mathematical bent and his familiarity with statistical methods have already proved singularly helpful in preliminary analyses of observations

collected by this group.

Through the kindness of Mrs. L. Emmett Holt and of Dr. L. Emmett Holt, Jr., authorization has been obtained for a somewhat more liberal interpretation of the conditions of award of the L. Emmett Holt Fellowship than had been permitted previously. Dr. Edward Ralph Schlesinger, in collaboration with Professor John Caffey, has carried out a study of the effect of hemarthrosis on the rate of growth in the adjacent bones.

#### DEPARTMENT OF NEUROLOGY

Professor Walter W. Palmer, Executive Officer

With the death of Professor Frederick Tilney on August 7, 1938, neurology lost one of its most inspiring leaders. Professor Tilney had been a member of the Department since 1906 and had served as Professor of Neurology and head of the Department since 1915. His contributions to the study of the comparative anatomy of the nervous system and to clinical neurology were both numerous and outstanding and will continue to take their place among the significant advances of medical science.

In order to facilitate the investigative work of the Department, extensive structural changes are being made in the Neurological Institute for the development of electrophysiological and chemical research. Additional space has also become available for these purposes in the Medical School. Funds have been assured for extension of the full-time group which is being created in the Department.

In past years the Department of Neurology has embraced both neuro-

anatomy and neuropathology. In the future the division of neuroanatomy will be under the direction of the Department of Anatomy and that of neuropathology will be administered by the Department of Pathology. No change is contemplated in the teaching of neuroanatomy or neuropathology beyond the logical placing of the course in neuropathology in the second year instead of in the third year, at which time it has been given in the past. Rearrangements have also been made in certain courses given by the Department of Neurology. The course on methods of neurological examination given in the second year by Dr. Walter O. Klingman and associates will have its hours consolidated to permit longer periods for didactic and for practical instruction. In the third year course, under the direction of Professor Charles A. McKendree and Professor S. Philip Goodhart, students will spend half of each day for two and one half weeks serving a clerkship either at the Neurological Institute or at the Montefiore Hospital. The advantages are many over former arrangements in which intensive instruction was not possible.

During the past year a wide variety of researches has been in progress. Dr. J. Roy Smith with the collaboration of Mr. Charles Walker, Dr. Robert W. Laidlaw, and Dr. Kate Constable has investigated the encephalographic abnormalities present in tumors of the posterior fossa and in epilepsy in children. Dr. Walter O. Klingman with Dr. Richard L. Day, of the Department of Diseases of Children, has made observations on skin temperature changes occurring during sleep and has studied the mechanism of acrocyanosis. Professor Abner Wolf with Dr. David Cowen and Professor Beryl H. Paige, of the Department of Pathology, has identified the etiological agent responsible for a type of granulomatous encephalitis in infants. Dr. Sidney Werner has demonstrated that undernutrition in rats causes a series of endocrine disturbances which appear secondary to degenerative changes in the pituitary gland. Dr. Werner has also established a laboratory for detailed assay of pituitary and sex hormones. Dr. Joseph W. Ferrebee with Professors Dana W. Atchley and Robert W. Loeb and Dr. C. Ragan, of the Department of Practice of Medicine, has studied the clinical and physiological effects of synthetic adrenal cortical hormone in a series of patients with Addison's disease. Dr. Ferrebee with Professor Atchley and Professor Loeb has extended his studies on the chemical disturbance present in familial periodic paralysis. Dr. H. Waelsch in association with Professor Warren Sperry, of the Department of Biological Chemistry, and Professor Abner Wolf has begun a study of the metabolism of the brain lipids by a method using deuterium. Dr. Waelsch is also continuing studies on methylation, an important chemical process in the detoxification of poisons, and in the synthesis of certain substances active in the metabolism of nerve tissue.

Professor Henry A. Riley has been continuing his anatomical studies of the brain stem, and Professor Otto Marburg and Professor Riley have been studying the connections between the hypothalamus and the medulla and spinal cord. Professor John E. Scarff has continued his observations on the localization of the primary motor areas for the upper and lower extremities. Dr. Robert C. L. Robertson has studied the changes in hemoconcentration that occur during and after major neurosurgical procedures. Professor Charles A. Elsberg and Dr. Hyman Spotnitz have extended their quantitative measurements of sensory perception and have also studied the relation between various sensory stimuli and their effects on parotid secretion.

A large number of clinical studies have been in progress and include those of Professor Josephine B. Neal on the value of Bulgarian belladonna in the treatment of Parkinson's syndrome, the sources of metastatic brain tumors by Dr. Clarence C. Hare, the blood sedimentation rate in patients with intracranial tumors by Drs. Klingman, Laidlaw, and Spotnitz, and a study of familial paroxysmal chorea-athetosis by Dr. Samuel Reback and Dr. Lester Mount.

### DEPARTMENT OF NURSING

## Professor Margaret E. Conrad, Executive Officer

On the basis of previous educational preparation a comparison of the University-enrolled students and candidates applying for entrance next September shows an encouraging trend toward more even balance between the degree and the diploma groups. It appears that there will be thirteen candidates for the B.S. degree at the Columbia University Commencement next year, the first group to be presented under the program inaugurated three years ago.

The class which entered in September, 1938, numbered 104 students. The diploma of the Presbyterian Hospital School of Nursing was awarded to seventy-seven students at the graduating exercises on June 8.

The year just past is the first in which there was no entering class in February. The adjustment of the class programs to the much larger class has required careful planning of schedules, a feat which Professor Eleanor Lee has accomplished with notable success. Clinical assignments also have been difficult. The teaching and supervisory load for the head floor nurses and head nurses, when a large class of inexperienced students arrives at one time, is obviously greater than that resulting from two smaller classes, arriving at different times. The fact that the large class was introduced to the wards with a minimum degree of confusion is due to the fine coöperation of Miss Helen Young, Director of Nursing, Presbyterian Hospital, and the entire nursing staff.

The educational program in the Neurological Institute became part of the University course on February 1, 1939, with the appointment of Miss Cecile

Covell as Assistant Professor of Nursing and Miss Dorothy Daubert and Miss Edith DeYoung as Instructors. The affiliation is open to our own students on an eight-week basis, and to other schools, as previously, for twelve weeks. It is considered an alternative to our affiliation in psychiatric nursing already in operation with the Westchester Division of the New York Hospital. It is expected that all three-year students will have one or the other of these affiliations, beginning with the Class of 1940.

The schedules for the affiliations in pediatrics and obstetrics have been revised and based on a twelve-week period, with the approval of the State Education Department. They are now so arranged that they interlock with each other and with the period in neurological nursing, allowing a student

to move from one service to another without loss of time.

Leaves of absence for study at Teachers College have been granted during the past year to Instructors Rhoda Reddig, Margaret Hawthorne, and Dorothy Hagner.

In accordance with the recommendation made last year, the Announcement of the Department of Nursing for 1939–40 has been published as a University bulletin. Its appearance has caused favorable comment from many sources. The Alumnae Association of the Presbyterian Hospital School of Nursing again awarded \$525 in scholarships for students in the School.

The progress made this year would have been impossible without the guidance and sympathetic interest of Miss Young and the members of the Presby-

terian Hospital Nursing Committee.

#### DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

Professor Benjamin P. Watson, Executive Officer

The routine of the Department has continued as in previous years. So far as undergraduate teaching is concerned there seems to be a progressive improvement in the type of medical student. This is evidenced both from the point of view of their previous training and of their personality. Many of them show a capacity for original thought in addition to facility in the acquiring of facts and methods. Several have interested themselves in statistical and other studies bearing upon their work in the Department. A few students of this type tend to raise the standard of work in the whole group.

In the field of graduate instruction there are six interns with one year's training; one resident who has completed a service of four years is graduated each year. Beginning on July 1, 1939, the term of duty of the interns will be extended to eighteen months. This will give them an opportunity to do additional laboratory work and should fit them to take the specialty board examinations if they desire to do so. The new laboratories in the School make this graduate training possible and also afford opportunities for study to those

interns and residents in affiliated hospitals who desire to make use of the facilities provided.

The research conducted by Professor William E. Caldwell, in coöperation with Dr. Howard C. Moloy and Dr. D. Anthony D'Esopo, on the female pelvis continues. They have become specially interested in the past year in the effects of different pelvic types and of the soft parts in the mechanism of labor. Several papers have been published and many demonstrations to scientific societies have been given. Professor William W. Herrick and Dr. Alvin J. B. Tillman continue their work on the toxemias of pregnancy. Dr. Charles Lee Buxton, who joined the staff a year ago, is engaged, in coöperation with Professor Earl T. Engle, of the Department of Anatomy, in a research on the function of the corpus luteum. Dr. Samuel Graff has published several papers of importance on his researches in the chemistry of malignant growths. He continues to work on the problem of pregnancy toxemia.

### DEPARTMENT OF OPHTHALMOLOGY

Professor Phillips Thygeson, Executive Officer

The Department suffered the great loss on August 22, 1938, of its Executive Officer, Professor John M. Wheeler, who died suddenly at his summer home in Vermont. Professor Wheeler's outstanding ability as a surgeon, teacher, and administrator made his loss of great concern to American ophthalmology. The Department continued under the direction of Professor John H. Dunnington, who on February 1 was appointed Clinical Director of the Institute of Ophthalmology. The staff is publishing a memorial volume which will appear in July, 1939, of Professor Wheeler's collected ophthalmological writings, consisting of fifty-one articles and a number of case reports.

There have been two additions to the staff, Dr. Ferdinand L. P. Koch and Dr. John S. McGavic. Dr. Koch, who this year completed a fellowship in ophthalmology at the Mayo Foundation of the University of Minnesota, came in April as Research Associate and will continue clinical and experimental investigations on internal diseases of the eye. Dr. McGavic, who recently received the degree of Master of Science in ophthalmology at the University of Cincinnati, came to the Department in July as Research Assistant and has been engaged in pathological investigations under the direction of Professor A. B. Reese.

Dr. Arnold Knapp, Professor Emeritus of the Department, was the guest of honor at the annual staff banquet and spoke on the advances in ophthalmology which have been made during the past thirty years.

The research program of the Department has progressed satisfactorily, and during the year thirty-two clinical and laboratory studies were published in ophthalmological and other special journals. Professor Karl Meyer, in col-

laboration with Professor Martin H. Dawson, of the Department of Practice of Medicine, published a study of synovial mucin in which the mocopolysaccharide acid of synovial fluid was isolated and found to be identical with that of vitreous humor. Studies of the specific enzyme from pneumococcus and streptococcus which hydrolyzes these polysaccharides have been continued and indicate that there may be some chemical basis for the apparent interrelationship of streptococcic infection, uveitis, and arthritis. These studies are being assisted by a grant from the John and Mary B. Markle Foundation. Dr. Antoinette Pirie, from Biochemical Laboratory, Cambridge, England, spent a few months as a guest in the laboratory working on the mechanism of bacteriophage action.

Professor Richard Thompson and his associates in the bacteriological laboratory completed studies on the effect of nonspecific protein injections on experimental corneal ulcers in rabbits and the mechanisms involved, and on the Grenz-ray treatment of experimental corneal ulcers. Other problems under study during the year were staphylococci in relation to postoperative infection, the possible relationship of pleuropneumonia-like organisms to uveitis, and the part played by lysozyme-like enzymes in the natural defense actions

of tears, saliva, serum, and leukocytes.

Professor George Smelser completed two projects in the exophthalmos program. The experimental work in connection with the inquiry into the relation of the thyroid to the development of the cornea and to the etiology of

conical cornea was completed.

A number of contributions to the study of the glaucoma problem were made; Professor John H. Dunnington reported on the intraocular tension in cases of sarcoma of the choroid and ciliary body; Professor M. Uribe Troncoso reported his clinical and experimental study of the effect of the local implantation of metallic magnesium on the intraocular tension in glaucoma; and Professor Reese published an analysis of the effect of early surgical intervention in the control of the disease.

Dr. Frank D. Carroll continued his study of tobacco and alcohol amblyopia and found that vitamin B1 had a curative effect irrespective of the continuation of tobacco or alcohol. With Dr. Charles Potts he continued a study of dark adaptation in normal and pathological subjects. Dr. Gordon M. Bruce published a report on retinitis in dermatomyositis. Dr. Raymond L. Pfeiffer reported on the treatment of certain diseases of the eye with Grenz rays. Professor Reese completed studies on precancerous melanosis of the lids and conjunctiva and on the operative treatment of radiation cataract.

The studies on trachoma by Professor Thygeson in coöperation with the United States Indian Service at the Theodore Roosevelt Trachoma School in Fort Apache, Arizona, were concluded this year. Observations indicating that the agent of trachoma was filtrable and that it had the essential characteristics

of a virus, were published. Recent claims that sulfanilamide exerts a curative effect in the disease were confirmed. The observation was made that sulfanilamide has a rapid curative action on the related virus disease, inclusion blennorrhea. The etiologic studies on chronic conjunctivitis were continued.

The staff contributed substantially to the program of graduate teaching conducted by the American Academy of Ophthalmology and Otolaryngology, eight members giving instructional courses at the Washington meeting in October. The new program of graduate teaching in the basic sciences as related to ophthalmology was begun during the year. With the coöperation of the Departments of Anatomy, Pharmacology, and Physiology instruction was given to our first year residents and to residents from affiliated hospitals. Laboratory facilities were made available to those planning to obtain the degree of Doctor of Medical Science, and three residents from affiliated institutions have taken advantage of the opportunity. During the year several new subjects were also added to the graduate teaching in clinical ophthalmology, and the Wednesday morning ward round, the Thursday afternoon pathological seminars, and the Friday afternoon staff conferences proved again to have great instructional value for residents and attending staff alike.

## DEPARTMENT OF OTOLARYNGOLOGY

Professor John D. Kernan, Executive Officer

The plan of undergraduate teaching in the third year has been continued unchanged. After preliminary instruction of the whole group in the technic of examination and diagnosis, small groups are assigned to each instructor and to the consultation room of the chief of the clinic. This gives each student a good idea of the problems arising in otolaryngology, both in adults and children. One whole afternoon session is given over to instruction in

bronchoscopy.

The graduate teaching has been further expanded. Another full-time fellow, Dr. Franz Altman, was appointed last October. The course in embryology, histopathology, and anatomy as related to otolaryngology has been given to the residents in the Department and to some from several other hospitals in the city. These courses were well attended. Two courses in the technic and practice of endoscopy have been given by Professors Kernan and George R. Brighton, for both the residents and the graduate practitioners in otolaryngology.

Dr. Edmund P. Fowler, Jr., has opened the laboratory for research conducted by the Department and several of the residents have been assigned problems. Dr. Page Northington has had charge of the cases in the Department of Neurology in which otolaryngological problems have arisen. One of the attendings is assigned to that work for a three-months' period. Dr. Daniel

Baker has continued his work on strictures of the bronchi and has successfully completed his thesis for the degree of Doctor of Medical Science.

The apparatus necessary for conducting the instruction in physiology of the production of the voice has been purchased. This course is to be under the direction of Dr. Bruno Griesman. Dr. Griesman is also conducting the studies on the motion of the vocal cord with the stroboscope. Dr. Sylvester Daly has continued his studies on the action of chlorophyll on tubercle bacilli in conjunction with the Departments of Bacteriology and Biological Chemistry. Dr. Robert McCollom has continued his work in the arthritic clinic. One of the residents of the Department has been assigned for work in allergy.

#### DEPARTMENT OF PATHOLOGY

Professor James W. Jobling, Executive Officer

Dr. Erik J. Kraus, formerly Professor of Pathology at the University of Prague, has been appointed Visiting Professor of Pathology for the coming year. Professor Alwin M. Pappenheimer has been absent on sabbatical leave. While in France he lectured before the Faculty and students of the University of Lyon on certain manifestations of vitamin E deficiency in domestic animals, Professor Abner Wolf has been granted a leave of absence and is planning to work at the Queen's Square Hospital in London and to attend the Neurological Conference at Copenhagen, Denmark. He has been given a fellowship by the Rockefeller Foundation. Professor Hans Smetana, on sabbatical leave, spent six months abroad studying for the greater part of the time in the laboratory of Professor Svedberg at the University of Upsala, Sweden. Dr. Erwin Jungherr, Director of the Animal Pathology Department at the Storrs Agricultural Experiment Station, was granted a leave of absence from that institution to work in Dr. Pappenheimer's laboratory on nutrition studies.

There has been a striking reduction in the total number of deaths during the past year in the hospitals for which the Department does the necropsies. There were 357 post-mortem examinations. The routine pathological work of the Sloane Hospital for Women has been carried out as in past years under the supervision of Dr. Eugene S. Coler and Dr. John H. Boyd. The regular course in gynecological and obstetrical pathology as given in the senior year has been maintained. New microscopic slides and gross specimens have been added from time to time to bring the course up to date.

The routine work in gynecological and obstetrical pathology has shown the usual increase. During the year 1,211 gynecological specimens were submitted for examination. Autopsies were performed on seventy-seven infants and stillbirths and on ten adults on the Obstetrical and Gynecological Service. Autopsies on babies are being done under the supervision of Professor Beryl

Paige, of Babies Hospital, inasmuch as the Babies Hospital staff is in charge of the Sloane Hospital Pediatric Service. Dr. Boyd has been investigating cases of cervical polypi with special interest in those showing hyperplasia and metaplasia. The new quarters of the Department, including lecture room and museum, have greatly facilitated undergraduate and graduate teaching.

Eighty-two autopsies were performed for the Neurological Institute, and the central nervous system was examined in fifty-nine cases from Presbyterian Hospital and fifteen from Babies Hospital. Two hundred and ninety-eight neurosurgical specimens were examined during the year. Monthly clinicopathological conferences have been held for each of the medical neurological services and weekly demonstrations of pathological material for the neurosurgical service. Daily instruction in histological neuropathology has been given the interns on neuropathology service.

In the research program, Professor Jobling and Dr. Edith E. Sproul have continued the investigation of the lipids of the Rous chicken sarcoma in an attempt to identify the active material consistently present in lipid extracts. Dr. Charles F. Stewart has been studying a possible effect of experimental changes in the cholesterol content of the blood and skin upon the development of the methyl cholanthrene carcinoma in mice. Dr. Robert C. Horn, Jr., under the direction of Professor Jobling, has been attempting to transmit malignant tumors by means of cell-free material.

The work on experimental leukemia initiated by Professor Maurice Richter and Dr. Joseph Victor in coöperation with Dr. E. C. MacDowell, of the Cold Spring Harbor branch of the Carnegie Institution, is being continued. Dr. Max Bovarnick, of the Department of Biological Chemistry, with the assistance of Mrs. Margaret Wintersteiner, is continuing the work. The present studies are concerned particularly with the question of immunity. It has already been established that immunity against certain types of leukemia may

be induced by the injection of embryonic or normal mouse tissue.

Professor Henry S. Simms with Mr. Abraham Stolman and Miss Nettie Stillman has found that chemical analyses of fibrous tissues show little change with age. Professor Theodore F. Zucker with Miss Lillian Hall and Miss Margaret Young has worked out a formula on the basis of growth records of rats which facilitates the detection and allows a more precise description of the results of nutritional deficiencies, particularly in relation to abnormal calcium and phosphorus metabolism. Professors Benjamin N. Berg and Zucker have completed studies dealing with the effects of extirpation of either a part or all of the adrenal gland and the effects of nerve section. Professor Homer D. Kesten with Miss Dorothy Meeker is continuing his work on the effect of high-protein diets on cholesterol sclerosis in rabbits. They have also initiated a study of the local chemical changes in early infarcts of the myocardium.

Professor Pappenheimer has continued his collaboration with Dr. Marianne Goettsch and Mrs. Johana Ritzmann, of the Department of Biological Chemistry, on nutritional disorders of laboratory animals. The nutritional encephalomalacia of chicks has now revealed itself as a manifestation of vitamin E deficiency and can be completely prevented by small doses of natural or synthetic alpha-tocopherol. The full report of the past eight years' work is to appear shortly in a monograph published by the Storrs Agricultural Experiment Station. Dr. Sproul, Dr. Elmer Sanders, and Dr. William Pyles have been studying the effect of ligation of the pancreatic ducts on the absorption of vitamin K and coagulation of the blood in adult chickens and in cats. Professor Smetana and Dr. David Shemin have been studying the effect of photo-oxidation on antigen and antibody preparations, using a variety of serological, chemical, and physico-chemical methods. The electrophoretic experiments and the studies of the sedimentation constants were made in the Physico-chemical Institute of the University of Upsala, Sweden, through the courtesy of Professor Svedberg.

Mrs. Julia T. Weld and Mrs. Lucy C. Mitchell have investigated the effect of sulfanilamide on the growth of virulent streptococci in fresh rabbit serum either with or without peptone. They have also been making a study of the

production of staphylococcus toxin by different methods.

Professor Wolf and Dr. David Cowen have been studying the causative microorganism of granulomatous encephalomyelitis of infants. Transmission of the infection to animals, studies of the experimental pathology, and cross-immunity tests have established the identity of the parasite as a toxoplasma. The human disease, therefore, has been named toxoplasmic encephalomyelitis. Further work on the source of the infection, mode of transmission, and possible intrauterine inception of the disease in the infants, are problems under investigation. Professor Paige, of Babies Hospital, has been a collaborator in this work.

In association with Dr. Hans Waelsch and Professor Warren Sperry, of the Department of Biological Chemistry, a study of the metabolism of brain lipids by a method using the hydrogen isotope, deuterium, has been initiated. A study of brain metabolism is in progress using the Fenn respirometer technic.

During the past year Professor William C. Von Glahn with Dr. Frederick Flinn, Associate Professor of Industrial Hygiene, has conducted experiments to determine whether the effect of lead arsenate on the liver can be hastened or retarded. It has been found that dried powdered yeast affords a very considerable degree of protection.

Dr. Dorothy H. Andersen is engaged in studies of the lipase, amylase, and trypsin in the duodenal juice of normal infants and of infants having chronic infections and in the possible relation of congenital vitamin A deficiency to congenital malformations. She has made the interesting observation that a high percentage of rats on the deficient diet have diaphragmatic hernias.

#### DEPARTMENT OF PHARMACOLOGY

Professor Charles C. Lieb, Executive Officer

For the first time the Department undertook the instruction of a group of graduate students. About sixteen students from the Departments of Otolaryngology and Ophthalmology were given a course in pharmacology designed to illustrate the actions and uses of drugs employed in these specialities. Dr. John McGavic, of the Department of Ophthalmology, and Dr. Sylvester Daly, of the Department of Otolaryngology, were assigned by their respective departments to assist in teaching applied pharmacology. There have been no important changes in the teaching and research personnel, nor have there been any noteworthy alterations in the teaching program for undergraduate students.

Dr. Wirt S. Scott, Jr., and Dr. Alan Leslie have continued and extended their work upon experimental coronary ligation. The effect of vasodilators upon the ligation coronary occlusion is being tested electrocardiographically.

Professor Michael G. Mulinos and Dr. Israel Shulman, supported by the William R. Warner Fund, have published the effects of deep breathing upon the peripheral circulation. They, in collaboration with Dr. Isidor Mufson, of the Department of Practice of Medicine, have published the results of their observations upon Reynaud's disease and its successful treatment with histamine iontophoresis and papaverine hydrochloride intravenously. They have also submitted for publication an article in which are compared the effects upon the vascular system of deep breathing and of smoking.

In collaboration with Professor Karl Meyer, of the Eye Institute, the staff has been investigating the cataract-producing propensities of dinitrophenol on rats. The glycosamine content of the anterior chamber fluid of the eye is being studied with the animal under various anesthetics, both local and gen-

eral, and under other experimental conditions.

Professor Mulinos and Mr. Leo Pomerantz, supported by the Philip Morris Fund, with Professor Raphael Kurzrok, of the Department of Obstetrics and Gynecology, and Miss J. Smelser, of the Department of Biological Chemistry, have published a paper on the effects of inanition on the oestrus cycle of the rat.

Professor Homer Kesten, of the Department of Pathology, in collaboration with Professor Mulinos and Mr. Pomerantz, has published further upon the pathologic effects of certain glycols and related compounds. The experimental work on the isolated iris performed by Dr. Manning Gunter during his third and fourth student years has been completed. Mr. Arthur L. Drew and Mr. Herbert Horne of the second year class have continued their work upon the denervated pupil, and Mr. Drew is to occupy himself with this problem during June and July under the auspices of the Smith, Kline, and French Fund. Dr. Dorothy Webster Martin has continued her investigation of the activity of choline esterase of serum in certain pathological conditions.

Professors Lieb and Mulinos have published a description of the Glatzel mirror with modification. The results indicate that this method of study should be of diagnostic value to the rhinologist. In this study technical assistance was given by Dr. M. Dworin, working under the Smith, Kline, and French Fund, and Mr. William G. Schoch of the first year class.

### DEPARTMENT OF PHYSIOLOGY

Professor Magnus I. Gregersen, Executive Officer

The staff for the coming year will have two new members. Dr. J. L. Nickerson, Professor of Physics at Mt. Allison University, Sackville, N. B., has been given leave of absence from his post in Canada and will be Assistant Professor of Physiology. During the past two summers Dr. Nickerson has been carrying on special research in spectroscopy here. Dr. Joseph Holmes, University Fellow for 1938–39, will be Instructor in Physiology. Mr. Horace O. Parrack won the Porter Fellowship of the American Physiological Society for 1939–40 and plans to work with Dr. Hallowell Davis in the Department of Physiology, Harvard Medical School.

The number of students in the weekly conference groups in the physiology course has been reduced from ten to five. This has resulted in distinct improvement in the free discussion, and both students and staff have expressed their satisfaction over the change. As part of the course, each student was required to select a topic on which to write a ten-page review based on the reading of original literature. Recognizing that this exercise is of fundamental value to the first year student, the Department of Biological Chemistry has agreed to share in the directing of the thesis work next year. The class was given special lectures during the course by Dr. Walter B. Cannon, George Higginson Professor of Physiology in the Harvard Medical School, and by Dr. August Krogh, Professor of Zoö-physiology at the University of Copenhagen.

For the first time the Department offered a two-weeks' course for medical graduate students. Fifteen men from various specialties enrolled in the course. The consensus of opinion of both the class and the staff was that didactic teaching is relatively ineffective in graduate work, and that a combination of laboratory work and seminars better suits the instructional needs of this group of students.

Dr. Kenneth S. Cole, Associate Professor of Physiology, is continuing his interesting studies of bioelectric phenomena, especially in studies of nerves. In March, Professor Cole delivered the Thirteenth Annual Priestley Lectures at Pennsylvania State College.

Dr. Walter S. Root, Associate Professor of Physiology, and Dr. F. F. Mc-Allister have been investigating the effect of anesthesia on the circulation and respiration. Their comparative studies on normal and chronic spinal animals have brought to light several important factors upon which the maintenance of an adequate circulation under anesthesia depends. Dr. Richard Bing has been testing the factors controlling the circulation in perfused organs. Professor Frank H. Pike is continuing his work on neurophysiological problems.

Professor Gregersen, Dr. J. H. Holmes, and Dr. Elizabeth E. Painter have been collaborating in a study of the water and electrolyte changes in dehydration and their relation to the mechanism of thirst. By utilizing methods recently developed, these investigators have succeeded in measuring simultaneously the changes in volume of each of the three fluid compartments of the body under various types of dehydration. Dr. Holmes has also been making a special investigation of the nature of the thirst produced by the intravenous injection of hypertonic salt solutions, and Dr. Painter has checked the sulfanilamide method of estimating "total body water" in dogs by direct determination of the water content. Mr. Guest, working under the direction of Professor Ernest L. Scott, has been testing the effect of diet, carbon-dioxide tension, low atmospheric pressure, and changes in the hydrogen-ion concentration of the blood on the rate of glycogen deposition in rats.

Nine members of the staff presented papers at the annual meetings of the American Physiological Society, held this year in Toronto, and three members attended the Sixteenth International Physiological Congress in Zurich, Switzerland.

Professor Scott's book on the application of statistical methods to the analysis of physiological data is nearing completion. A new laboratory manual for nursing schools, written by Dr. Barry G. King, Assistant Professor of Physiology, and Miss Helen M. Roser, Instructor in Nursing, has just been published by W. B. Saunders.

### DEPARTMENT OF THE PRACTICE OF MEDICINE

Professor Walter W. Palmer, Executive Officer

Certain changes in the teaching program of the Department mentioned in the report of last year have been in effect during the past year and in the main have accomplished their purpose. No important change was made in the general scheme of teaching physical diagnosis and clinical pathology except to increase the use of the opportunities at Bellevue Hospital for teaching of physical diagnosis. The valuable clinic at Sea View Hospital continues to be of great assistance, particularly because of the coöperation of Professor George Ornstein. An alteration of the program of the third year clinical clerks proved to be important. Arrangements were made to have the clerks called in rotation for all admissions including those of nights, Saturdays, and holidays. The plan has succeeded admirably for both students and interns. For

the fourth year clerks in Vanderbilt Clinic the innovation of a student clinic was instituted under Professors Randolph West, Franklin M. Hanger, and Kenneth B. Turner. All three instructors are most enthusiastic over the character of cases available for these clinics. The results of the first year are encouraging, and it should be possible with proper treatment to develop an exercise of real value to the student. Much more success in arranging for the students to follow their old cases has been achieved. The students' initiative and energy have much to do with this part of the work.

Professor I. Ogden Woodruff again brings up a problem encountered at Bellevue Hospital which is disturbing. The young men of promise on his staff leave for other clinics because of the lack of private hospital privileges

and opportunities for research.

Professor A. Raymond Dochez and Miss Katherine Mills have studied as many varieties of cold virus as possible in hopes of establishing their relationship to the viruses of influenza. They have studied an unusual type of bronchopneumonia, prevalent for the past two years, with a view of establishing its clinical importance and cause. Professor Yale Kneeland with the assistance of Miss Barbara Mulliken has investigated the insusceptibility of the newborn rabbit to respiratory infection in the hope of throwing some light on the insusceptibility of the human newborn infant to the common cold. In addition, they have been studying the antibody response in patients with lobar pneumonia being treated with sulfapyridine and have made the somewhat surprising observation that antibodies do not appear at the time of the crisis. Only rarely do they appear at all, and then at a week to ten days after the fever has disappeared.

During the past year Professor Franklin M. Hanger has continued his studies on the flocculation of lipoid emulsions by human serum. The mechanisms underlying the test have been investigated from the clinical, chemical,

and immunological standpoint.

Professor Alvin F. Coburn with the assistance of Dr. Lucile Moore, Mrs. Ruth Pauli Callender, and Miss Eleanor Kapp has continued studies of rheumatic fever, especially the problems of disease mechanism and therapy. The mode of action of salicylates is being investigated as a therapeutic approach, and the use of sulfanilamide as a prophylactic measure is being extended. Three years of observation with this chemotherapeutic agent suggest that it may play a helpful role in the prevention of rheumatic recrudescence.

Dr. Ralph H. Boots and Professor Martin H. Dawson working in the Edward Daniels Faulkner Arthritis Clinic have described twenty-four cases of arthritis associated with lympho-granuloma venereum, a hitherto unreported clinical entity. Gold salts in the treatment of rheumatoid arthritis have been studied. Studies of rat-bite fever by Professor Dawson would indicate that the spirillum may only be an accidental saprophyte, and that the disease

is more probably due to infection with strepto-bacillus moniliformis. An intensive investigation is under way concerning the nature of the so-called pleuropneumonia group of microorganisms. These studies have shown that certain of the pleuropneumonia-like strains are variant phases of cultures of streptobacillus. This observation has opened up an entirely new field for bacteriological investigation. With these organisms it has been possible to reproduce an experimental polyarthritis in mice which closely resembles rheumatoid arthritis. Through the coöperation of Professor Karl Meyer, of the Institute of Ophthalmology, studies have shown that synovial mucin is not a muco protein, as heretofore suspected, but is an acid polysaccharide of high molecular weight. Dr. Joseph C. Turner has studied the similarities between tumor tissue and embryonic tissues through observation of the antigenic properties of mouse sarcoma 180 and of the developing hen's egg.

At Welfare Hospital for Chronic Diseases Professor Forrest E. Kendall has demonstrated the existence of five antigens in the globulin fraction of normal human serum. Dr. Robert C. Darling, Professor Dickinson W. Richards, Jr., and Dr. André Cournand have shown that the factor of maldistribution of gases in the lungs practically invalidates residual air measurements by the usual methods in patients with severe pulmonary emphysema. Dr. Joseph Victor has observed certain metabolic differences in the auricular as compared with ventricular muscle of mammalian and amphibian hearts. His studies have been made on the hearts of mice, rats, rabbits, guinea pigs, and

frogs.

Professor Kenneth B. Turner and Dr. Alfred Steiner have found in lobar pneumonia that the period of hypocholesterolemia concomitant with the febrile stage is succeeded by weeks or months of wide fluctuations in the serum cholesterol value exceeding that which was subsequently found to be normal for each patient. Dr. Steiner reports choline to be effective in delaying the appearance of experimental atherosclerosis in cholesterol-fed rats. Further experiments by Dr. Steiner indicate that choline administration causes the reabsorption of the aortic lesion in one-half the rabbits in whom atherosclerosis has been induced by cholesterol feeding. Drs. David M. Weeks, Steiner, and Victor have continued the studies on the effect of the pexis between the kidney and the spleen or omentum upon the blood pressure of dogs rendered hypertensive by Goldblatt's method of renal artery constriction.

Professor Alvin L. Barach with Dr. Steiner, Dr. Weeks, and Dr. Ernst F. Goldschmidt has investigated the possible role that anoxemia plays in the renal ischemic hypertension of the dog. Dr. Arthur J. Patek, Jr., and Dr. Joseph Post have continued their study on the effect of diet and accessory substances rich in the vitamin B complex on the course of cirrhosis of the liver. Dr. Patek and Dr. Charles Haig have continued studies which reveal abnormal dark adaptation in nineteen of twenty-four patients with cirrhosis

of the liver. Improvement in the ability to dark adaptation followed the administration of vitamin A concentrate. Dr. Post, Dr. Victor, and Dr. Oscar Ratnoff have studied the effect of vitamin B<sub>1</sub> on the course of carbon tetrachloride hepatitis in rats. Dr. Haig has observed the error produced by the pupillary light reflex on dark adaptation measurements. Dr. Patek and his associates are studying the effect of riboflavin deficiency in dogs and pigs with special reference to liver function and serum protein levels. With Dr. Ratnoff, Dr. Patek is completing a statistical analysis of the natural history of cirrhosis of the liver in 350 patients. Professor David Seegal with Professor John D. Lyttle, of the Department of Diseases of Children, and Dr. Emily N. Loeb and Elizabeth L. Jost has reported that 94 percent of a consecutive series of 116 cases of acute glomerulonephritis exhibited hemolytic streptococcus infection prior to the onset of the nephritis. A further report by Dr. Loeb with this group emphasized the striking immunity of patients with healed acute glomerulonephritis to subsequent attacks of acute nephritis following hemolytic streptococcus infections.

Professor Dana W. Atchley, Professor Robert F. Loeb, Dr. Joseph W. Ferrebee, and Dr. Charles A. Ragan have studied the effects of synthetic cortical hormone in human diseases of the adrenal glands, and the results have been most encouraging. They have investigated the problem of mechanism of the electrolyte disturbance in familial periodic paralysis. Professor Kenneth B. Turner has been occupied with accumulation of data concerning the blood iodine levels in man and the determination of factors influencing the blood cholesterol of rabbits, particularly in the absence of the thyroid. Dr. Alexander B. Gutman and Mrs. Ethel Benedict Gutman have continued their work on phosphatases, with special reference to prostate phosphatase. This enzyme was discovered in the blood of patients with metastatic prostate carcinoma, thus affording a laboratory test for this condition which appears to be of some usefulness clinically. Studies on hyperproteinemia in lymphogranuloma venereum have been continued. Professor Randolph West is studying the distribution of nitrogen in the body following the administration of liver extract to patients with pernicious anemia and with sprue and is attempting to determine the mechanism by which sulfanilamide acts.

Research in immunochemistry has been continued under the direction of Professor Michael Heidelberger. Attempts have been made to extend the laboratory's quantitative methods to the study of complement and its function in immune reactions. Encouraging progress has been made. In collaboration with Dr. Hattie E. Alexander, of the Babies Hospital, the quantitative precipitin and agglutinin methods have been adapted to the study and control of type B anti-H influenza sera, the problem being of interest in connection with the finding that the otherwise uniformly fatal type B influenzal meningitis in children could often be cured with antisera prepared in the rabbit. In spite of

the general use of sulfapyridine there has been a steady call for the rabbit antipneumococcus globulin prepared by the laboratory. The antibody has been
used successfully with the drug in many of the most severe cases of pneumonia
on the wards in the Harkness Pavilion. Dr. Henry P. Treffers has continued
work on protein-antiprotein systems. Dr. Sulo A. Karjala, formerly of the
University of Wisconsin, has been appointed National Tuberculosis Association Fellow and is making progress with the fractionation of the specific and
nonspecific polysaccharides in avian tubercle bacilli. During the first four
months of 1939 Dr. Bertil Josephson, of the Department of Biochemistry,
Caroline Medical University, and the Seraphin Hospital, Stockholm, was a
guest in the laboratory studying antibody purification and analytical methods.

Professor Robert L. Levy with Dr. Howard G. Bruenn and Dr. Norman E. Williams has continued studies of induced anoxemia. A test has been devised for the detection of coronary insufficiency. The test appears to be of practical value in distinguishing pains of cardiac origin from others with which they might be confused. With Dr. Richmond L. Moore, of the Department of Surgery, patients with anginal pain have been treated with paravertebral alcohol block. This work, begun ten years ago, has been continued, and a survey of results observed during this period is being made. With Professor William C. Von Glahn, of the Department of Pathology, a more extended study has been made of the curious group of cases of cardiac hypertrophy of unknown etiology, first described in 1934. The cause of the condition remains obscure.

Professor Barach has shown that the intermittent use of helium is capable of arresting severe or status asthma. Severe more-or-less continuous asthma has been consistently cleared up so that patients are ambulatory and, in most cases, are free from attacks much of the time. Severe asthma may be converted into a mild form of the disease in 95 percent of the cases, in two to five days of intermittent helium treatment. The effects of intravenous injections of hypertonic solution in asthma have been studied in collaboration with Dr. John Scudder and Dr. Henry A. Cromwell. Studies of the effects of inhalation of low oxygen atmospheres in normal and nervous individuals at the Bellevue Psychiatric Hospital, in collaboration with Dr. Paul Schilder and Dr. B. Kagen, revealed a variety of disturbances in the emotional behavior of those tested; there was especially a loss of the power of emotional restraint. Studies of varying oxygen atmospheres in experimental pulmonary tuberculosis are being continued in collaboration with Dr. Maxim M. Steinbach, as well as further studies of the effects of low oxygen mixtures in normal and cardiac subjects.

Professor George Draper reports that the large material accumulated through the years is now ready for analysis by Dr. H. L. Shapiro, of the American Museum of Natural History. During the past year, with the assistance of Dr. W. C. Dupertuis, a large number of individuals who have had infantile paralysis have been studied anatomically.

With the coöperation of Dr. Howard C. Moloy, of the Department of Obstetrics, x-ray studies of the pelves of male cases of peptic ulcer and gall bladder disease have been made. Distinct differences in the male and female pelvic characters were found in this series. Anthropometric and statistical studies are being made on patients afflicted with keratoconus. This work was originally undertaken at the request of Professor John M. Wheeler. A study of patients with tic douloureux which was actually done in the spring of 1938 has been finished. Dr. Fritz H. Lewy, of the Neurosurgical Department of the University of Pennsylvania, requested Dr. Dupertius's coöperation for this work. Dr. John L. Caughey, Jr., has continued research in the physiological panel of human constitution. Interest has centered on the heart-rate response to the intravenous injection of atropine, and on the individual's pattern of breathing as traced by the Benedict-Roth metabolism apparatus.

Dr. Charles A. Flood with Professor Fordyce B. St. John has completed a study of the natural history, prognosis, and indications for surgery in duodenal ulcer. With Dr. Armistead C. Crump and Dr. DeWitt Hendee Smith he has been studying the application of gastroscopy to gastric disease including particularly gastric ulcer and carcinoma and various forms of gastritis.

Professor William P. Thompson in collaboration with Dr. Louis M. Rousselot, of the Department of Surgery, has continued to study the effects of portal

vein hypertension in laboratory animals.

At Bellevue Hospital in addition to the work of Professor Richards and Dr. Cournand, Dr. H. McLeon Riggins has studied further the occurrence, nature, and influence of tuberculous lesions of the trachea and bronchi. Dr. William G. Childress has studied relationships between tuberculosis and pregnancy. Dr. William H. Stearns and Professor J. Burns Amberson, Jr., have been continuing an investigation of the origins and nature of early tuberculous lesions.

### DEPARTMENT OF PSYCHIATRY

Professor Nolan D. C. Lewis, Executive Officer

The work of the Department of Psychiatry in the medical wards has progressed steadily. A total of 143 consultations was made, as compared with the 162 of last year. In addition to these routine medical consultations, special attention has been given to the patients on the fracture ward and also in gynecology where special research projects are being pursued. Two consultants have been available for work in the admitting and distributing services of the out-patient department.

There were thirty-eight psychiatrists working in the Department in Vanderbilt Clinic at various times during the year, none attending less than one day per week for three months of the year and some attending as many as four days

a week for eleven months of the year.

The undergraduate and graduate courses of instruction have been conducted as usual with abundant clinical material for presentation. In the course for the second year students which introduces the subject of psychiatry, Professor Nolan D. C. Lewis presented the concepts of biological integration of the individual with emphasis on constitutional factors and differences. The lectures for the fourth year class are designed to emphasize the practical care and treatment of types of mentally ill individuals who may, at any time, constitute a practical problem in a specialty or in general practice.

Clinical conferences with the third year medical clinical clerks have been continued as in previous years. Dr. H. Flanders Dunbar, Professor George E. Daniels, and assistants have conducted three conferences on one of the services

throughout the three trimesters.

The end result of the lectures and teaching activities of the staff has been a gradual improvement in the understanding of the psychiatric point of view

with greatly improved histories of cases.

Vanderbilt Clinic accommodates one half of the students for clinical clerkships, the others receiving their instruction at the Psychiatric Institute. The system of having two to four students per instructor for children's psychiatric problems and one or two students per instructor for adults allows for a close supervision of work. The teaching of psychiatry in its relation to children has received special consideration by the Friday morning staff.

A large number of research problems have been under way at the Psychiatric Institute, the work having increased about one third during the last year. Problems in clinical psychiatry, the pharmacological shock therapies and associated phenomena, electro-encephalography, parotid secretion rate in various forms of mental disorder, anaphylactic phenomena, several problems in neurochemistry and neuropathology and the field of experimental psychology have been under investigation. Several of these problems are coöperative projects between the Institute and other departments in the Medical School.

In order to facilitate the analysis, evaluation, and writing up of the nineyears' study under grants from the Josiah Macy, Jr., Foundation of serial admission of patients with cardiovascular disorders, diabetes, fractures, and psychosomatic problems seen on the wards and in the clinic, Dr. Dunbar has been less active than usual in the routine and teaching programs in the Department. However, a number of tangible accomplishments have been attained including follow-up studies on all available patients included in the original investigations and continued intensive studies of special patients with hypertension and rheumatic fever.

Professor Daniels and Professor Earl T. Engle, of the Department of Anatomy, are collaborating on studies of the physiology of emotions. Professor Engle is especially interested in the physiology of sex and in the broader aspects of the fertility-sterility problems which bring him into contact with those experimental and social features of human biology, so important to the psychia-

trist. The departments which are now working closely together are Anatomy, Gynecology, Urology, Practice of Medicine, and Psychiatry. Professor Daniels has continued to work with ulcerative colitis patients.

Dr. Giles W. Thomas has continued his investigation of the possible relationship between rheumatoid arthritis and the emotional factors which apparently influence the course of the disease. Some factors of therapeutic significance are now coming into the foreground, and there is sufficient evidence to justify continuing the program for another year. Coöperative research has been planned with Dr. Sidney C. Werner, of the Department of Practice of Medicine, in which a joint psychological and endocrinological evaluation of certain disorders is undertaken. A wide variety of research interests, particularly of a clinical nature, is represented on the Vanderbilt staff of psychiatrists. A number of special problems supplied by the clinic material are foci for continued investigation.

## DEPARTMENT OF RADIOLOGY

Professor Ross Golden, Executive Officer

Professor Ross Golden served as chairman of the Commission on Education of the American College of Radiology for the Annual Conference of the Teachers of Radiology in Chicago in February and has written a number of papers for scientific meetings in radiology. He has continued to conduct instruction of medical students and has organized the excellent program of graduate training in the group of hospitals affiliated with the University.

Professor Robert P. Ball has continued his x-ray studies of the pelvis and took part in the programs of the American Roentgen Ray Society in September, 1938, and of the Communication Group of the American Institute of Electrical Engineers. He is collaborating with the Normal Child Develop-

ment Clinic in roentgen anthropometric measurements.

Professor Paul C. Swenson has published papers with Dr. George G. Holzman, Dr. Edmund P. Fowler, Jr., Dr. William E. Caldwell, and Dr. Howard C. Moloy, and with Dr. Alvan L. Barach, Dr. Octa C. Leigh, and Dr. John Nelson, dealing with roentgenologic aspects of studies in their several fields. He is continuing his study of low-back skeletal anomalies with Dr. H. C. Pheasant, of the Department of Surgery, and with Dr. William B. Parsons and Dr. Alexander B. Gutman he is preparing exhibits on hyperparathyroidism for the Graduate Fortnight. Dr. Murray M. Friedman with Dr. Phillip Polatin, Dr. Meyer M. Harris, and Dr. William A. Horwitz, published a paper entitled "Vertebral Fractures Produced by Metrazol-induced Convulsions" which was read before a number of psychiatric societies. Dr. Lucien M. Pascucci is doing research on bone manifestations in peripheral vascular disease, and with Dr. Ball he is making a study of hernias which they investi-

gated by x-ray examination. Dr. Theodore Eberhard is continuing his study on the effect of 200 K.V. on the lymphatics. Dr. Charles L. Hinkel is inves-

tigating the effect of x-rays on the growth of bones in young rats.

Changes in personnel in the Department included the resignation of Dr. Orville L. Henderson to become director of the Department of Radiology at the Samaritan Hospital in Troy, New York; Dr. Waldemar C. Sternbergh, upon completion of his service, took a position at the Clifton Springs Sanitarium, Clifton Springs, New York and Dr. Edwin F. Gray will leave for Terre Haute, Indiana, where he has accepted a position.

# DEPARTMENT OF SURGERY

Professor Allen O. Whipple, Executive Officer

This year's report includes several interesting developments in the hospitals associated in the teaching program. The Surgical Service at Bellevue Hospital has been materially augmented by the opening of the new Surgical Chest Service under the auspices of Columbia University. The establishment of this service marks a great advance in pulmonary surgery in this city. Forty-seven beds in a specially equipped and air-conditioned wing in the new C and D building at Bellevue were opened in August. This unit increased most effectively the teaching facilities for undergraduates and the opportunities for resident graduate training in correlating the medical and surgical care of this group of chronic disabling disease. For the past few years the efficacy of the operative care not only of bronchiectasis, lung abscess, chronic empyema, but also of certain forms of unilateral tuberculosis of the lungs and pleura has been demonstrated. The residency is a very valuable adjunct in the training of residents in general surgery desiring further experience in chest surgery. Professors Miller and Lambert, who for many years worked unceasingly to accomplish this combined clinic in chronic pulmonary disease, deserve the greatest credit for the present accomplishment.

The freeing of beds on the First Surgical Division at Bellevue by the transfer of chest lesions to the new unit has increased the capacity of this service. Dr. John A. McCreery and his staff have been interested in the past year in developing the Blood Bank with the other divisions. Friends and relatives of patients brought to the hospital as acute emergencies are glad to contribute blood to the bank. Frequently only a part of this contribution can be used, so that the remainder becomes available for other patients who cannot afford to pay for transfusions. Stored blood is of more value on the surgical than on the medical wards, especially for an acute service such as that at Bellevue Hospital. During the first eleven months of the functioning of the Blood Bank approximately 1,200,000 cc. of banked blood were used for transfusion at Bellevue Hospital.

In Dr. Benjamin P. Farrell's report from the New York Orthopaedic Hospital attention is called to the changes in orthopedic clientele in the past two decades. The most striking, perhaps, is the decrease in the number of children cared for in that clinic. This is due to the marked decrease in tuberculosis of bones and joints and in the lowered incidence of rachitic deformities, due to public health measures. In 1919 the out-patient, the hospital, and the country branch treated 1,650 patients with tuberculous joints. By 1938 the number had dropped to 507.

The second point of special interest in the type of patient treated is the increase, total and comparative, of adults operated upon for orthopedic lesions. This reflects the greater interest now being taken in the care of the adult cripple, and is the result of the training that the modern orthopedic surgeon obtains in up-to-date orthopedic hospitals, after he has had adequate experience in general surgery. Now he does reconstructive surgery rather than the

old-time application of plaster splints and jackets.

In the field of both undergraduate and graduate teaching, the laboratory in surgical pathology is performing an increasingly important service. Professor Arthur Purdy Stout and his associates have had more teaching material and more students than at any time since moving to the Medical Center. Every Monday afternoon there is an intradepartmental surgical pathology conference. It has proved so successful that it is now attended by many of the younger members of the Department of Pathology, by most of the radiotherapists, and, during the last year, by a number of men from outside the institution, including Dr. Garburi, Pathologist of the Bombay Cancer Institute; Dr. Williams, of the Radiothera peutic Department of the Middlesex Hospital, London; Dr. A. Beach, Federal Cancer Fellow assigned to this institution; Dr. C. Brown, Pathologist of the Lincoln Hospital; Dr. Sophian, Pathologist of Roosevelt Hospital; and Dr. Riopelle, one of Professor Masson's assistants from Montreal. It has been very stimulating to have these men from institutions in this and other countries participate in the conferences. During the second half of the year the residents in general pathology and in surgical pathology have had a weekly interdepartmental conference. This conference was begun as an experiment in 1938 and has been so successful that it has become a fixture.

All of the regular workers in the surgical pathology laboratory assist Dr. Stout and Dr. Virginia K. Frantz in the instruction of the third year clinical clerks in surgery. A large majority of the graduate students in this laboratory are volunteers who work in the laboratory because of their sincere desire to learn more about the pathology of surgical lesions and because of Dr. Stout's increasing reputation as an authority and teacher in this subject.

The work of the Surgical Service at the Presbyterian Hospital and Vanderbilt Clinic has increased both in teaching and in actual surgery. Among many problems studied perhaps the most constructive therapeutic advance has been in the treatment of acute intestinal obstruction. This has resulted from the use of the Miller-Abbott tube. Its use in obstructed bowel is most effective in deflating the loops proximal to the point of obstruction. In 1918 our mortality percentage in acute obstruction was about 60 percent, the same as that reported from other well-known clinics. In 1935, as a result of a better knowledge of restoring salt and fluid balance in these cases the mortality was reduced to 32 percent. Last year in some seventy-five patients treated by the deflating tube the mortality was reduced to 8 percent.

During the past year, for the first time, the teaching of anesthesia both to undergraduates and to residents has been under the supervision of a full-time physician anesthetist. Professor Virginia Apgar has been most successful in coordinating the anesthesia of medical anesthetists with the work of the nurse anesthetists. She and Miss Penland and Miss Justus have coöperated constantly in this endeavor, and as a result the Anesthesia Department of the hospital has been brought to a high level. Dr. Apgar's training in physiology, surgery, and anesthesia gives promise for productive work both in graduate teaching and in physiological research. Two residents in anesthesia in Presbyterian Hospital have been added to replace vacancies on the nurse anesthetist staff. The regional technics have been practiced frequently on cadavers and have been used at the request of the various clinics in dealing with intractable pain. Undergraduate teaching in anesthesia is being greatly improved. Over three hundred cases have been anesthetized by fourth year students under careful supervision. Each group, in addition, has received an average of eight to ten hours of didactic work during the eight mornings of anesthesia work. Outside reading is also required. Two research problems are under way, one with Dr. George Humphreys on the effect of intrathoracic procedures on circulation in the human subject, and one with Dr. Charles R. Drew and Dr. John Scudder on the effect of avertin on blood specific gravity.

The Fracture Service provided a wide variety of bone injuries for active teaching throughout the year. Professor William Darrach and Professor Clay Ray Murray and other members of the staff presented a number of papers and publications on methods of dealing with different types of fractures. Dr. Barbara Stimson published a new manual of fractures and dislocations.

It is a great source of satisfaction to see the work of the residents and other members of the surgical staff in clinical and laboratory investigation. Among the studies are included those by Professor Whipple, Dr. Louis M. Rousselot, and Dr. William P. Thompson, of the Department of Practice of Medicine, on experimental production of the hepatosplenomegaly or Banti's syndrome in dogs. This pathogenesis was suggested by the observation of the above workers in cases of schistosomiasis mansonii studied in their visits to Puerto Rico. Studies on living, normal and pathological, mammalian spleens by transillumination are being continued by Professor Whipple and Dr. David W. MacKenzie, Jr. Drs. Octa C. Leigh, Jr., and John A. Nelson are using the Miller-Abbott tube for diagnostic and therapeutic studies in acute and chronic ileus and peritoneal infections and to record the physiological response of various drugs in the immediate postoperative period and during deflation of acute ileus. Dr. John Gius is investigating the factors predisposing to postoperative pulmonary complications. Lymphatic drainage in tumors of the colon and rectum is being investigated by Dr. Robert S. Grinnell in particular relation to lymph glands metastasis in carcinoma of the colon and rectum. During the last year Dr. Drew and Dr. Scudder have been working on a wide variety of problems concerned with surgical shock, fluid therapy, plasma proteins, the role of potassium in surgical conditions, and blood preservation. Dr. Kenneth B. Olson in conjunction with Drs. Edwin Chargaff and Philip R. Partington is working on the problem of blood coagulation as related to a number of diseases, studying the use of heparin as a clinical anticoagulant in the prevention and treatment of disease characterized by intravascular coagulation, and the effects of vitamin K on patients having a bleeding tendency. Dr. Olson is also reviewing the phosphatase determinations in patients with obstructive jaundice in order to ascertain the usefulness of that determination in the diagnosis of obstructive jaundice.

Problems in wound healing are being studied by Dr. Cornelius J. Kraissl, particularly in relation to the bacterial contamination in the air of operating rooms. Continued studies are being made on the digestion time of various brands of catgut in artificial media and catgut extract is being supplied to the wards for determination of catgut allergy. Studies are also being made on the efficiency of various new types of pre-operative skin antiseptics. One of these, a new organic iodine combination, has proved to be very efficient bacteriologically when compared to the usual tincture of iodine, and it seems

to have less burning tendency.

A method and the significance of measuring the electromotive force across the gastrointestinal membranes in human subjects have been worked out by Dr. Edmund N. Goodman. A study of the pathways of abdominal pain emphasizing the clinical significance of the referred pathways of pain and the technique of blocking them in the various pathological conditions is also under investigation by Dr. Goodman. Grafting of insulin-producing tissue into diabetic patients is the field of inquiry of Dr. Margaret R. Murray who is also investigating the cellular origin of the specific nerve sheath tumor.

Professor Frank L. Meleney and Dr. Harold D. Harvey have continued their studies on peritoneal protection. Professor Meleney and Miss Johnson are carrying forward their significant work with zinc peroxide on certain surgical aerobic, anaerobic, and micro-aerophilic bacteria. They are continuing their studies of sulfanilamide and sulfapyridine. Dr. Helen Zaytzeff-Jern and Mrs. Oscanyan have continued their studies with bacteriophage. Dr. Kraissl

and Mrs. Cimiotti have completed the preliminary studies on the use of ultraviolet radiation for the sterilization of the air of the operating room, and an effective apparatus has been designed, with their help, by the Westinghouse Electric Company and is being installed in one of the operating rooms for clinical trial. Dr. Alfred B. Longacre has also completed his preliminary studies of the development of staphylococcus antitoxin by the use of toxoid injections. This work has been aided by a gift from the Lederle Laboratories and will be continued during the coming year. Dr. Longacre, Dr. Zaytzeff-Jern, and Professor Meleney have reviewed the laboratory and clinical experiences in the treatment of staphylococcus septicemia with bacteriophage. The results bear out the value of Dr. Zaytzeff-Jern's double test for potency which has been in use during the last two and a half years. Dr. Gordon Stevenson has carried on some preliminary studies on the chronic ulcerative colitis problem and methods of using zinc peroxide in the treatment of that disease.

### DEPARTMENT OF UROLOGY

Professor J. Bentley Squier, Executive Officer

The year 1938–39 is marked by the completion of the physical expansion of the Department within the School and Hospital; and until further additions to Vanderbilt Clinic are made, permitting the moving of the urological outpatient department to a floor at a level with the Urological Department of the Hospital, no further expansion will be planned or now seems desirable. The new laboratories on floor M have made it possible to undertake a number of researches which are already bearing fruit.

The program of graduate education undertaken by the University has resulted in some excellent work within the Department. Four members of the resident staff of the clinic have been accepted as candidates for the degree of Doctor of Medical Science and will present their theses and themselves for examination in the fall. The work in the fundamental sciences covered by these men has been done in the Departments of Anatomy and Bacteriology where all possible assistance and encouragement have been given them.

Dr. David Byrne's thesis will cover his work on the mechanics of the descent of the testicle and the pathology and neurophysiology of the sympathetic and parasympathetic nervous systems of the prostate and bladder. Dr. Percival A. Duff will report the result of his investigation of methods of assay of the male hormone of the reproductive system. Dr. Ralph Yeaw has continued the work started by Dr. Thomas P. Shearer on the problem of the reaction of bacteria in various acid media, and he has begun the clinical application of their findings. A résumé of the work of Dr. Shearer and Dr. Yeaw was presented at one of the monthly seminars of the Department of Bacteriology and was most favorably commented on by Professor Gay.

The work of the Faculty of the Department of Urology has been actively

continued in a number of fields of clinical research by various members of the staff and results have been presented during the year before several surgical, medical, and urological organizations. The undergraduate work, which for the past two years has been confined to the fourth year class, continues to be satisfactory to the Faculty and students alike.

### MEDICAL LIBRARY

# THOMAS P. FLEMING, Librarian

The total number of books loaned and used in the library was 94,695, an increase of 14.8 percent over the 1937-38 figure, and an increase of approximately 80 percent over that for 1936-37. In spite of this expansion the library is quite unable to fill the demands. The library adequately provides for the needs of the students; a part of the increase in the use of the library is a result of the students' greater employment of library facilities, stimulated by the library staff, together with the changes in the methods of instruction. Research workers who are carrying on detailed investigation are seriously handicapped by the failure to supply a number of journals in different fields. Many foundations have granted money to the Medical Center to aid research. It is not an unusual occurrence, however, to have the experiments interrupted because the library is unable to provide the literature needed by research workers to cover vital phases of their work. The research men are more and more depending upon the library and expecting it to provide the literature in their respective fields. The opening of the graduate laboratories has given a considerable impetus to the demands.

Împortant acquisitions were confined to filling broken sets and to the purchase of several recent periodical titles. These purchases were made primarily in the fields of anesthesia and radiology. The holdings of publications in these two fields were noticeably weak when compared with the activities of the departments themselves. The Department of Radiology is very active in so far as the library is concerned, and their fellows assigned to surgical pathology

are particularly heavy users.

The memorabilia collection continues to grow. It is unfortunate that closer attention was not paid at an earlier date to the problem of preserving the publications of the institution. Even by combining, for example, all the existing collections in the libraries of New York City, including the Academy, the New York Public, the New York Historical Society, and all the divisions of the University, it is impossible to assemble a complete collection of the College of Physicians and Surgeons catalogues or annual announcements. Of the various papers submitted for prizes, only those of the last few years are on hand.

The library has coöperated in many ways with affiliated institutions, par-

ticularly through interlibrary loans and the interchange of duplicate materials. This has been especially true of the Eye Institute, the New York Post-Graduate Medical School, and the School of Tropical Medicine. In the future there should be some closer integration of these libraries and with the library of the Crocker Research Institute.

The librarian reported last year the innovation of "open" reserves. This year, the policy was continued in certain fields to the gratification of the students. Under this system, students may examine, browse, and select collateral and supplementary reading. It is much to be preferred to the "closed" system, where the student demands a given book, consults it and it alone. It is to be deplored that lack of adequate space prohibits the extension of the policy. Additional space would be a boon to the students.

During the past year, lectures on the use of the library, with particular emphasis on indexes to the literature of each particular field, were given by the Medical Librarian to the first year students in dentistry, nursing, and physiology. In addition, the librarian has consulted with graduate students in the Department of Physiology, which will enable them to carry on a "literature search" with a minimum expenditure of time.

The library continued to serve as a training ground for prospective medical librarians. During the past year, three young women served varying periods of time in order to increase their knowledge of the scope and content of medical

librarianship.

Professor Jerome P. Webster made a contribution for the purchase of books relating to plastic surgery. From the Phi Delta Epsilon Fraternity, we received an additional contribution of fifty dollars for the purchase of books as a memorial to Dr. Jacob Braun, College of Physicians and Surgeons, '05. The Department of Otolaryngology paid for subscriptions to five journals. The Journal of Clinical Investigation, through the courtesy of its editor, Professor Randolph West, presented the library with the current numbers of fifty-nine journals received in exchange for its publication. The Neurological Institute, through the courtesy of the editor of its Bulletin, Professor Charles A. Elsberg, presented the library with the current numbers of sixty-two journals received in exchange for their publication. Professor William J. Gies, the former editor of the Journal of Dental Research, placed at the library's disposal 1,442 current numbers of journals, some received in exchange for the Journal, the balance being journals to which Professor Gies personally subscribed. Professor Hans T. Clarke gave the library the current numbers of five journals. Professor Elsberg presented the library with 287 bound and 490 unbound numbers of journals. T. H. McKenna, Inc., gave the library twenty-two bound books and 236 unbound numbers of medical journals. From G. E. Stechert and Company, the library received 258 bound and 343 unbound volumes of earlier medical literature. Dr. Reginald Auchincloss, late in December, made it possible for the library to acquire a machine for the photographic reproduction of printed materials. We are now able to supply our readers with photographic copies of articles in books and journals.

The library and the Library Committee continue to sponsor a series of seminars and lectures pertaining to the history of medicine. The seminars were devoted to the history of the School of Medicine of Columbia University, and placed particular emphasis on the part it played in the development of American medicine.

The collection of portraits is gradually being put into usable form. Several hundred of them were mounted last year, but about 250 remain unmounted. Approximately a thousand of these portraits have not been indexed. About two hundred reprints of historical articles have also been added to the files. The collection of serials including hospital reports was increased by 320 new titles.

### NEW YORK POST-GRADUATE MEDICAL SCHOOL

### WILLARD C. RAPPLEYE, Director

Physicians enrolled in the School came from forty states and fourteen foreign countries. The following table indicates their enrollment in each of the several departments:

Bacteriology											1
Dermatology and S											
Gynecology											78
Medicine											203
Neurology and Psyc	hiati	y									25
Ophthalmology .		٠.									<b>2</b> 9
Orthopedic Surgery											20
Otolaryngology .											7
Pathology											7
Pediatrics											42
Radiology											21
Surgery											63
Traumatic Surgery											39
Interdepartmental (											
Occupational Dis	ease	and	Tr	aur	na						6
Endocrinology .											
Physical Therapy											
Physical Diagnos											6
Total .											652

As in years past, the library has been used extensively by members of the professional staff, matriculates, members of the house staff, and physicians living in the neighborhood. In addition, the Hospital purchased sixty-one books to form the nucleus of a section on nursing for the use of members of the nursing staff and nurses taking postgraduate courses.

There were a number of outstanding gifts to the library during the year in addition to the contribution from the departmental funds. The Cardiac Fund shared the cost of purchasing twenty-five volumes of *Handbuch der normalen und pathologischen Physiologie*. Professor George Miller MacKee presented the library with a large number of unbound periodicals, and Dr. John F. Erdmann continued his generous gifts of both books and journals. Dr. Robert L. Loughran completed the library's files of the *Transactions* of the

American Laryngological, Rhinological, and Otological Society.

Aside from the increase in the number of part-time courses for physicians in the metropolitan area, the principal change in the curriculum during the year was the addition of several interdepartmental courses. The most popular of these was a course in endocrinology lasting two weeks, in which the Departments of Dermatology and Syphilology, Gynecology, Medicine, Neurology and Psychiatry, Pediatrics, and Surgery coöperated in presenting a survey of recent developments in this important field. The course in occupational disease and trauma, inaugurated in 1937 by the Departments of Medicine and Traumatic Surgery with lecturers from other departments, has been continued. In the fall of 1938, a course in physical diagnosis was given by the Department of Medicine with the coöperation of eight other departments, and a new course in physical therapy by nine departments was inaugurated in the spring of 1939.

Another significant development was the discontinuance, on the recommendation of the Committee on Administration, of courses in laboratory technic which were formerly open to college graduates. The Committee on Administration also recommended the creation of a Department of Pathology, separate from Bacteriology. This was carried out by the generous action of the Board of Directors in supplying the necessary funds. Dr. Maurice N. Richter was appointed Professor of Pathology and Executive Officer.

The curriculum for the first year of the long-term training for specialization in dermatology and syphilology has been enriched by the addition of a full-time course of three weeks in allergy given through the coöperation of the Department of Medicine and of a course in industrial dermatology and training in radium therapy of cancer and the various dermatoses, given through the coöperation of the Department of Radiology. The clinical part of the training now includes a period in which three matriculates are assigned to one instructor and, under his close supervision, make a complete investigation and therapeutic study of a limited number of selected patients. Through

the courtesy of Dr. E. R. Maloney, Professor of Dermatology in the New York University Medical School, the long-term matriculates have the opportunity of spending one half day each week in the skin clinics of Bellevue Hospital. Dr. DeSanctis has arranged opportunities for them to see cases of infectious skin diseases at the Willard Parker Hospital.

Through the generosity of Professor George Miller MacKee, Executive Officer, the Department has acquired copies of more than three thousand lantern slides of skin diseases that he had collected over a period of thirty years. These bring the total now available in this department for teaching purposes to more than five thousand lantern slides. The Department reports twenty-six pieces of research work completed during the year, as well as forty-seven subjects

which are being studied currently.

Among the completed studies, perhaps the most significant were those dealing with the following subjects: dandruff and seborrhea; cutaneous manifestations of trichophyton purpureum; infections of the skin due to monilia albicans; the trichophytin test—its value as a diagnostic aid; rapid heating of sear for the Kline tests; the Ide test for syphilis; the Laughlin test for syphilis; the effects of hydrogen-ion concentration, fatty acids and vitamin C on the growth of fungi; the fungicidal properties of human sweat; the lip partition and albumin and globulin ratio in lymphogranuloma venereum; the excretion of indoxyl compounds in the urine in cases of eczema in infants; and a clinical survey of skin cancer and precancerous dermatosis including the lipid and protein studies.

Members of the staff of the Department of Gynecology have continued their studies of trichomonas vaginitis in an effort to improve the cultural methods of its growth and to develop a new therapeutic substance of high acidity predicated on an investigation of hydrogen-ion concentration in patients suffering from this infection. The study of the effect of estrin and progestin upon the human castrate uterus with special reference to the treatment of primary and functional amenorrhea is being continued. The therapeutic value of sulfanilamide in the treatment of infections of the urinary tract

in the female is being studied.

An effort is now being made to determine the efficiency of acetyl- $\beta$ -methylcholine chloride in the treatment of dysmenorrhea. A determination of the usefulness of estrogenic hormones in the treatment of senile vaginitis has

been completed.

The Department of Medicine followed the same general plan of teaching that was instituted in 1937 of having a short full-time course in each of the major fields of internal medicine, and a series of part-time courses designed especially for the practitioners in the metropolitan area. In addition, this department inaugurated the interdepartmental course of ten days in physical diagnosis which has been mentioned above.

At the request of the American College of Physicians, a special ten-day course in medicine was arranged for members of that organization, immediately preceding the annual meeting of the College in New York.

The division of endocrinology has carried out clinical studies in various subjects, especially the use of the male sex hormone in endocrine disorders. The cardiac division engaged a physician as full-time Research Assistant, and has carried on studies of metabolism and respiration in heart disease (in collaboration with the respiration laboratory), pharmacological studies of digitalis, and several problems in electrocardiography.

The division of gastroenterology has conducted a number of investigations of chronic ulcerative colitis, and coöperated with the division of peripheral vascular diseases in studying the relation of chronic ulcerative colitis to vitamin C deficiency. A manual of the procedures used in the clinic for diseases of the liver and biliary tract was published.

The division of peripheral vascular diseases has been studying cevitamic acid and a formula for estimating the element of nephritic retention. Continuing the work of this division on the effects of nicotine, attention has been directed to its effects in the production of circulatory changes in animals and man and the effect of sex hormones on these changes.

In collaboration with the medical research laboratory, other divisions of the Department and members of the resident staff have studied and published articles on the following subjects: the action of acetyl- $\beta$ -methylcholine chloride (mecholyl) and benzyl methyl carbinamine sulphate (benzedrine sulphate) on the gall bladder; the effect of the prolonged administration of the thyrotropic factor of the anterior lobe of the pituitary on experimental atherosclerosis in rabbits; the cholesterol content of the blood in heart disease; the effect of alcohol and alcoholic liquors on the normal and pathological kidney; the excretion of insulin by normal and pathological rabbit kidney; and the total, free, and ester cholesterol content of the serum in hay fever and in asthma.

The members of the staff of the Departments of Neurology and Psychiatry participated chiefly in courses offered by other departments, and in interdepartmental courses. A new full-time course of one month in clinical neurology was offered as an experiment, and has seemed to meet a need felt by general practitioners. Continual efforts are being made by the Department to improve the content of this course.

Neurological subjects that have been under investigation by staff members include such subjects as the nucleus lateralis medullae with special reference to its efferent connections with the cerebellum; an experimental study of the anatomic connections of the Clark-Monokow nucleus; theelin treatment of involutional melancholia; neurophthalmic myelitis with psychosis; experimental studies of capillary hypofunction in brain trauma; the cause and patho-

genesis of congenital external ophthalmoplegia with pyramidal tract lesions; and the effect of hyperthermia in the treatment of certain postencephalitic syndromes.

Among the psychological and psychiatric subjects of current research projects are the psychopathological aspects of emotional divorce, further studies in the psychopathology of marital relations, primary behavior disorders in children, and objective measurement of emotional instability in children.

The special course in motor anomalies of the eye, given to ophthalmologists, has again been more largely attended than any other course offered by the Department of Ophthalmology. General practitioners have been enrolled in courses in medical and industrial ophthalmology.

The Department of Orthopedic Surgery continued to offer separate courses for the general practitioner and for the surgeon, the former being a diagnostic course.

Seven members of the staff have been actively engaged in research, including studies of bone lengthening, bone grafting for traumatic unstable backs, hereditary weak feet, internal derangement of the knee joint, tendon transplantations in the lower extremity, suppurative arthritis and osteomyelitis, surgical treatment of rheumatoid arthritis, fascial adhesions in the back, and fascia in myosynovitis.

Following the reorganization in the Department of Otolaryngology, a diagnostic course was offered for the general practitioner, and a number of special courses for the otolaryngologist. In addition, members of the Department participated in seminars in medicine and pediatrics, and gave a large amount of time to the instruction of the resident staff.

After the discontinuance of the courses in laboratory technic which were formerly offered to college graduates, the teaching in the Department of Bacteriology has consisted largely of participation in courses offered by other departments.

The research in bacteriophage which has been in progress for many years in this department has been continued, with demonstrations before several medical organizations. Other means of specific treatment of severe infections have also been studied, particularly the use of the immune serum, of bacteriostatic chemicals (such as neoarsphenamine, gentian violet, and the sulfonamides), and the blood of immunized transfusion donors.

The staff has believed for years that the work of the School and Hospital would be strengthened by the creation of a separate Department of Pathology. This was made possible late in the current year.

The teaching program of the Department of Pediatrics contained the same seminar course and clinical courses as during the previous year. Visits to the Willard Parker Hospital and the Newborn Service of the French Hospital have added to the value of the seminar.

An active research project is being conducted on the early detection of rheumatic activity by clinical and laboratory methods, and the immunization of an unselected group of patients, over a period of two years, with a graduated dosage of hemolytic streptococcus filtrate. An exhibit of a clinical and pathological study of sixty-four cases of malignancies in infancy and childhood was presented at the annual meeting of the New York State Medical Society in May.

In addition to the teaching done by the Department of Radiology in full-time and part-time courses, there has been an increased amount of participation in courses offered by other departments of the Post-Graduate. The teaching schedule has been so heavy and the rush of the clinical work of the Hospital so great that no time has been left for research. The facilities of the Department have been improved by the purchase of some new equipment and by installations which have provided safety of operation for the existing apparatus.

A new course in anesthesia has been offered by the division of anesthesia of the Department of Surgery. It is given to only one matriculate at a time, for a period of two weeks, eight hours each day. This course is taught by the physician who is in charge of anesthesia in the Hospital, who also teaches anesthesia to the residents.

In the surgical seminar of three months, which is given three times each year to a maximum class of eight surgeons, efforts have been made to increase the emphasis on clinical teaching. The ulcer clinic, which has grown steadily in the past few years, is offering more instruction than formerly, and the teaching in the vascular clinic has become more valuable. Because of the increase in the autopsy rate for surgical cases, there has been more autopsy material available for teaching.

Members of the staff of the tumor clinic of this department have engaged during the year in clinical and laboratory studies on: supernumerary breast, pathological changes in various breast conditions, the pathology of carcinoma of the tongue, melanotic tumors, occupational cancer due to lubricating oils, electrosurgery in cancer of the rectum, malignancies of the parotid gland, and the value of radium therapy in epithelioma of the lip.

The clinic on diseases of the liver and biliary tract is conducted jointly by this department and the Department of Medicine. These studies currently deal particularly with the treatment of "colon bacillus" carriers, the relation of gastric acidity to the symptomatology of gall bladder disease, the causes of morbidity and mortality in the surgical treatment of biliary tract disease, the causes of gall stones and common duct stones, and the determination of the functional activity of the pancreas in disease.

The advanced course which the Department of Traumatic Surgery formerly offered to traumatic surgeons was discontinued. Two courses were offered: an intensive course for surgeons, and a diagnostic course for general practitioners. The Department also gave a regular series of lectures and a weekly operative clinic in the seminar offered by the Department of Surgery, and did a large part of the teaching in the interdepartmental course in occupational disease and trauma.

Members of this department have continued their intensive study of fractures of the neck of the femur, particularly the operative treatment. Efforts are also being made to evaluate the efficacy of sulfanilamide and allied products in the treatment of traumatic infection.

It is increasingly apparent that the Post-Graduate is meeting more effectively than at any time its real opportunities in the field of postgraduate training and in the University program. The marked increase in student enrollment during the past year indicates the need of the profession for continued training in many rapidly advancing fields of scientific study and practice. It has been very gratifying from the standpoint of public service to see the increasing number of physicians who desire to improve their knowledge of the most recent methods of diagnosis and treatment of disease and to know that the Post-Graduate is able to meet these larger community responsibilities.

The growing obligations of the institution cannot be met, however, without added facilities, laboratories, and equipment. There is urgent need of the provision for fellowships for recent graduates to assist in the noteworthy contributions which members of the staff are making at present under the restricted facilities and budgets.

The success of the interdepartmental courses and other improvements in instruction have been gratifying to the staff, who deserve great credit for the enthusiasm and coöperation that they have shown in working out these plans. The courses serve a most useful purpose in presenting to physicians a correlated understanding of many of the involved medical problems with which they are confronted in practice. Intensive specialization in medical knowledge has made it increasingly difficult for the physician to keep abreast in all fields of endeavor. These combined clinics and interdepartmental courses are proving to be of the greatest possible help to the practitioner.

#### SCHOOL OF TROPICAL MEDICINE<sup>1</sup>

Professor George W. Bachman, Director

On November 7, 1938, work commenced on the construction of two new wings to the School and the University Hospital, which buildings will eventually house a library and a Department of Physiology, respectively, and will afford additional and valued opportunities for training and research. The year also marks the partial completion of the new animal house, a section of which

<sup>&</sup>lt;sup>1</sup> For details see the Report of the Director of the School of Tropical Medicine.

has been satisfactorily occupied. In January, the Island of Santiago was the scene of much activity when 439 rhesus monkeys (*Macaca mulatta*) were released in an effort to breed and raise conditioned animals with known histories and free from disease, which may be used for experimental work both in the institution and elsewhere.

Among the visitors to the School during the year were Dr. George M. Saunders, of the American Leprosy Association; Mr. Joseph A. LePrince, of the United States Public Health Service; Dr. S. Bayne-Jones, of the School of Medicine of Yale University; Dr. Peter Bassoe, of the Department of Neurology of Rush Medical College; Dr. Ernest E. Irons, of Chicago, and Dr. Earl T. Engle, of the Department of Anatomy of Columbia University; Dr. Fred Marschall, of the Institute of Tropical Medicine at Hamburg, Germany, who studied in the School's Department of Pathology; Mr. Norman Taylor, of the Cinchona Products Institute of New York City; Dr. W. A. Sawyer, Director of the International Health Board of the Rockefeller Foundation; Mr. Maurice Dartigue, of the Department of Rural Education of Port-au-Prince, Haiti; Dr. Hilario Arenillas, of Costa Rica; Dr. Harriet S. Cory, of Washington University in St. Louis and Dr. Thomas S. Lee, of George Washington University; Dr. Isador Lubin, distinguished economist; and Dr. Francisco E. Benzo, Commissioner of Health of the Dominican Republic. The School felt greatly honored with the visit paid to it by various members of the West Indies Royal Commission. This group was composed of Dr. Mary Blacklock, of the School of Tropical Medicine at Liverpool; Professor F. L. Engledow, of the School of Agriculture at Cambridge; Dame Rachel Crowdy; and Mr. Percy G. Mackenzie, of Lloyd's of London.

The School was visited by members of the committee, appointed by the President of the United States on the recommendation of the Interdepartmental Committee on Coöperation with the American Republics, who arrived to consider the possibilities of expanding the facilities of Puerto Rico "to the end that the University might serve both the specific needs of Puerto Rico itself and also as a Pan-American institution of higher learning and as a meeting ground for the scholars and students of the Americas."

The Legislative Act of August 31, 1938, called for the formation of a new Special Board of Trustees, which now comprises Dr. José M. Gallardo, Commissioner of Education and chairman of the Board; Mr. Francisco López Domínguez, Commissioner of Agriculture and Commerce; and Dr. F. J. Capó, all of whom represent the University of Puerto Rico. Dr. Willard C. Rappleye, Dean of the College of Physicians and Surgeons, and Dr. George W. Bachman, Director of the School, represent Columbia University on the Board.

The important weekly conferences and lectures for the medical profession have been continued with increasing success. The meetings have also been

influential in encouraging original investigations among the medical profession at large, which investigations, in turn, are helping to build up a valuable library of medical literature on local conditions. Among those who have contributed valuable assistance in the programs this year are Dr. Fernando Asencio, of Arecibo; Dr. B. Dávila, of Río Piedras; Drs. E. García Cabrera, Ramón M. Suárez, O. Costa Mandry, A. Martínez Alvarez, J. B. Caso, J. A. Seín, J. Landrón, J. J. Alonso, Henry P. Colmore, Robert Bussó and Juan Sabater, of San Juan.

The library continues to be the nucleus around which the Faculty and visiting members center a large part of their activities. In 1935, an addition was found necessary to accommodate the needs of that time. Notwithstanding, two years ago demand for more space resulted in a request for a modern library building, this last being made possible through a grant of the Puerto Rico Reconstruction Administration. The third floor of this wing will be devoted to living quarters for visiting professors and research students, thus establishing a more satisfactory basis for coöperation with other institutions.

A significant step in the annals of *The Puerto Rico Journal of Public Health and Tropical Medicine* was the transference of its publication to Columbia University Press, and its production as an incorporated publication under the auspices of the latter. This transfer was made possible through the coöperation and interest of Mr. Frederick Coykendall, president of the Board of Trustees of Columbia University. Under this arrangement, the *Journal* still retains the coöperation of the Department of Health of Puerto Rico, as well as that of its former joint editors, Dr. E. Garrido Morales, Commissioner of Health, and Dr. G. W. Bachman, Director of the School of Tropical Medicine.

The increasing facilities of the School are making coöperation with other universities and colleges possible and attainable. During the year there was collaboration with the Agricultural Experiment Station at Río Piedras in studies of island forage crops; with the Department of Surgery of the College of Physicians and Surgeons; with Dr. Colmore, of the Presbyterian Hospital, on studies in sprue; and with Dr. G. W. Kenrick, of the Department of Physics of the University of Puerto Rico, on solar radiation. During the recent maneuvers of units of the United States fleet in Caribbean waters the School assisted in various instances with laboratory diagnoses requested by the officers in charge. The American Leprosy Association, through Dr. George M. Saunders of its Division of Epidemiology, and the Department of Bacteriology are collaborating in an epidemiological survey of St. Thomas and neighboring islands. Dr. D. S. Martin, of Duke University, is interested in a project on refection in rats, which is part of the work of the Department of Chemistry. Dr. W. H. Taliaferro, of the Division of the Biological Sciences of the University of Chicago, is still working on the project dealing with the mechanism of immunity, while Dr. O. Costa Mandry, of the Department of Health, has been working on the prevalence of syphilis in Puerto Rico. Mr. G. W. Beebe, of the National Committee on Maternal Health, has the assistance of the P.R.R.A. staff now working under the supervision of the Department of Bacteriology and Hygiene in compiling vital statistics with reference to maternal health in Puerto Rico.

Research on streptococcus infections in the tropics continued during the year by Professor P. Morales Otero and his staff. The bacteriology of bovine mastitis has been the object of consistent observations with ten different herds studied in detail. The biological characteristics of pneumococci, isolated in Puerto Rico, have been the object of careful study. The work on Brucella infections continues. The histopathology of the cutaneous reaction of *B. abortus* is being studied by this department in coöperation with the Department of Pathology.

Through the coöperation of Dr. F. Menéndez Guillot, veterinarian of the Department of Agriculture and Commerce, and of Dr. C. Muñiz, of the Agricultural Extension Service of the University of Puerto Rico, studies of the agglutination test for B. abortus have been conducted. Work in gland tuberculosis continues in coöperation with Dr. J. Rodríguez Pastor, of the Department of Health.

The coöperative work undertaken with the Puerto Rico Reconstruction Administration in reporting the health and socio-economic conditions of the agricultural workers of the Island is now completing an analysis of the physical measurements of certain groups of agricultural workers in order to investigate the physical impairments of adults in the group.

During the year the Department of Chemistry under Professor Joseph H. Axtmayer has been occupied largely with continuing its important studies in the fields of nutrition. The *Manual de Bromatología*, a 300-page handbook of the chemical and nutritional values of Puerto Rican foodstuffs, covering the work of the Department for the last six years, should be of inestimable value to the peoples of the tropics. The coöperative project with Dr. D. S. Martin, of Duke University, "The Role of Monilia in Refection in Rats," is completed as regards the experimental work in the laboratories of the School. The role of experimental tuberculosis and diet with vitamin B<sub>1</sub>-free rats continues as a coöperative project with the Departments of Bacteriology and Pathology.

The major problem with which the Department has been concerned during the year was the continuance of the studies on the nutritional values of Puerto Rican forage crops, work which is carried on jointly by the Agricultural Experiment Station of the University of Puerto Rico and the School, and financed with funds provided by the Bankhead-Jones Act.

Phytochemical research continues for the second year at the University of Wisconsin under Mr. Conrado F. Asenjo, John Simon Guggenheim Founda-

tion Fellow and member of this department. Under the supervision of Professor Edward Kremers, of that university, work on the chemical composition of the latex of Ficus pumila L. and of the tubercle of Cyperus rotundus L. has

progressed most favorably.

The continuance of construction in the University Hospital limited the principal activities of the Department of Clinical Medicine under Dr. Juan A. Pons to its existing out-patient clinic. However, during the past nine months a marked increase in the number of admissions and revisits was noted. Forty-seven towns of the Island, besides neighboring islands, were represented among the patients.

In spite of the heavy routine, the staff of the Department have kept up their interest in a number of medical problems. The work on mucositis of the gastrointestinal tract, a coöperative study between Dr. A. Rodríguez Olleros, formerly of Madrid, Spain, and Dr. F. Hernández Morales, of the Department, will be submitted shortly for publication. A demonstration of the gastroscopic and rectosigmoidoscopic findings in sprue patients proved of considerable benefit to the staff. New attacks were made upon the lymphangitis problem, both from the immunological and the treatment aspects of the disease. Dr. J. Noya Benítez continued his observations on peripheral vascular diseases, and as time permitted, other members of the staff also made interesting and profitable observations.

For six weeks of the past summer, instruction was given on the clinical aspects of the diseases found in Puerto Rico to a group of students from the College of Medicine of the University of Cincinnati. As the University Hospital was closed, all practical instruction was conducted at the Post Hospital of San Juan. The spirit of coöperation shown by the staff of that institution was most helpful and greatly appreciated.

The studies on hookworm disease under Professor Rafael Rodríguez-Molina continued for the sixth consecutive year on the original selected group of heavily parasitized and markedly anemic young men from the mountains of the Island. The work on tropical anemias is being continued. The use of sulfanilamide in recurrent tropical lymphangitis was continued in the outpatient clinic.

Under the Department of Medical Mycology and Dermatology a review of the literature on the mycology of chromoblastomycosis has revealed original communications reporting at least twelve hitherto unknown fungus species. The morphologic study of the organism causing trichomycosis, or piedra of the hair, was completed. Another case of Madura foot was discovered by Dr. A. Franceschi at Aguirre in September, 1938.

The coöperative project of the Department of Medical Zoölogy under Professor William A. Hoffman with the Departments of Chemistry and Pathology, pertaining to vitamin A in schistosome-infected rats, has been practically

concluded. Mr. Robert A. Robinson, a student of the College of Physicians and Surgeons, concluded his study on the effect of foundin upon immature schistosomes in rabbits.

The Division of Parasitology of the Agricultural Experiment Station began its coöperative work with the Department of Medical Zoölogy in December of last year, when Dr. John S. Andrews and his associate, Mr. José F. Maldonado, joined the staff of the School. The Division is primarily interested in the study of tropical diarrhea in calves, as it occurs in Puerto Rico, and the relation of this disease to the gross infestations of the animals with intestinal parasites. The disease known as bloat colic, to which Puerto Rican horses are susceptible, is also being studied in its relation to heavy nematode infections. In addition to the foregoing activities, the Division is studying the fluke diseases of the domestic pigeons and conducting an active parasitological survey of the Island, most important from the standpoint of human and animal diseases.

The demands of the Department of Pathology apart from the surgical pathology and autopsy services, temporarily reduced because of the closing of the University Hospital, continue to be heavy. Besides the routine services which the Department offers to doctors, clinics, and hospitals in Puerto Rico and neighboring islands, the staff under Professor Enrique Koppisch has found time to carry forward research problems of its own, as well as to coöperate with other departments of the School. Work continues on the studies of the filterable virus, acute rheumatic fever, skin reactions to various fractions of B. abortus bacillus and on S. mansoni in Puerto Rico. In collaboration with members of the Departments of Chemistry and Medical Zoölogy, the study on the effect of A-deficient diets, as compared with normal diets, in experimental schistosomiasis has been completed. The experimental type of leprosy with material originally obtained from a wild leprous mouse has finally been established in albino rats and mice.

Studies on ultraviolet solar radiation preliminary to work on climate and health are being conducted by Dr. G. W. Kenrick. Consideration has also been given to extending the scope of the Department's program to include a wider range of physical measurements of interest to a general program on tropical physiology, climate, and health. Preliminary conferences relative to such a general program have been carried on with Dr. D. B. Dill and coworkers at the Harvard University Fatigue Laboratory, and with Dr. Magnus Gregersen, of Columbia University.

The Santiago primate colonies are being successfully developed under direct charge of Dr. C. Raymond Carpenter. The thirty-seven-acre island was acquired through the generous intercession of Mr. Antonio Roig, of Humacao. Generous grants from the John and Mary R. Markle Foundation and from the Macy Foundation made possible the initiation of the program in 1938.

In order to secure as many disease-free animals as possible, Dr. Carpenter left on a collecting expedition to Siam, Indo-China, and Malaya for gibbons and to India for rhesus monkeys. The expedition was successful in adding four-teen gibbons to those already established in the colony of the School, while 439 monkeys were brought to Puerto Rico and released on Santiago Island.

In addition to the above-mentioned breeding stock collected for the colonies, a large group of experimental specimens was supplied to the laboratories of the Department of Anatomy of the College of Physicians and Surgeons. The Carnegie Institute colony at Baltimore, under the direction of Dr. Carl Hartman, was largely restocked, while other valuable specimens were turned over to several zoölogical societies.

Between 1935 and 1939 such Federal agencies as the Department of the Interior and the Puerto Rico Reconstruction Administration made available sufficient funds to build two three-story additional wings, recondition the University Hospital to include an extra story on each wing, and construct a modern animal house for research purposes. On the land transferred to the School by the United States War Department, a new library and physiology building are now being erected. The first and second floors of this new library will contain reading rooms, an auditorium, several small seminar rooms, a microfilm reading room, and other modern library facilities. The third floor is to be given over to comfortable living quarters for visiting investigators and students. The physiology building will care for an already overcrowded Department of Medical Mycology and Dermatology on its third floor; a Department for the Study of Tropical Physiology on its second floor, while the fourth will house the animals to be used in the work on climate and health. There will be a general workroom on the ground floor. It is the aim of the authorities to complete this building program by the end of 1940.

Plans should be made for the creation and maintenance of a Department of Tropical Physiology. The importance of this work in relation to the investigations that are now being conducted at the School cannot be overemphasized. In recent years a great deal of attention has been directed to the study of the effects of climate on health, as well as to new approaches in the study of medical problems.

Contributions have been received from a number of sources in support of the research program. In addition to anonymous donors to practically every department we gratefully acknowledge contributions from the following sources: American College of Dentists; American Medical Association; Brain Research Foundation, Inc.; Mr. George L. Brill; Carnegie Corporation of New York; Ciba Pharmaceutical Products, Inc.; Mr. F. Trubee Davison; Difco Laboratories, Inc.; Mrs. Brooks Emeny;

Mr. John Fraser; Anna Fuller Fund; General Education Board; Grade A Milk Association; the Philip Hanson Hiss, Jr., Memorial Fund; Hoffman-LaRoche, Inc.; Mrs. John Sherman Hoyt; Dr. Benjamin Jablons; Jovan Laboratories, Inc.; Mr Frederick L. Katz; W. K. Kellogg Foundation; Lederle Laboratories, Inc.; Dr. and Mrs. Frederic S. Lee; Mrs. John Dwight Leggett, Jr., and Mrs. Kenneth W. Watters, Jr.; Josiah Macy, Jr., Foundation; the John and Mary R. Markle Foundation; the William J. Matheson Foundation; Montgomery Corporation; Philip Morris & Co., Ltd.; National Committee on Maternal Health, Inc.; National Oil Products Company; National Tuberculosis Association; the Personal Products Corporation; Phi Delta Epsilon Fraternity; John B. Pierce Foundation; estate of Dr. Francis I. Proctor; Mrs. Bertha M. Reinach; Mr. Udo M. Reinach; the Rockefeller Foundation; Dr. I. C. Rubin; E. R. Squibb & Sons; Dr. and Mrs. M. Maxim Steinbach, Mr. Percy S. Straus; University Patents, Inc.; officers and directors of the Upjohn Company; William R. Warner & Co.; and Dr. Jerome P. Webster.

Respectfully submitted,

WILLARD C. RAPPLEYE,

Dean

June 30, 1939

## SCHOOL OF ENGINEERING

#### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

I have the honor to present the report of the School of Engineering covering developments to June 30, 1939.

There has been much discussion in our Faculty through special committees of the ever present problem of readjusting our program of work to integrate more effectively into the changing and developing needs of the engineering profession. One most important fact comes to the fore from all these discussions. Not only the engineering profession, but the community at large, is demanding with increasing insistence that the engineer of tomorrow must have a broader, more basic, less specialized education in his undergraduate studies. The demand goes beyond the scientific-technological subject matter to insist that the undergraduate engineer be well grounded in the fundamentals of an integrated stem of studies in the social-humanistic field.

Not only is this demand evident in our own discussions, but with additional emphasis it is appearing in the papers and discussions of the Society for the Promotion of Engineering Education. To study the situation a special committee of that society has been organized, on which I have the honor to be chosen, to report to the Society on the aims, scope, and length of the engineering program of studies.

What has been our philosophy at Columbia on these points? From 1910 to 1914 our Faculty discussed at great length the future trends of engineering education. With prophetic foresight they said that ultimately the education required of engineers must contain the basic fundamentals of the social-humanistic stem of studies in the liberal arts. Fortunate in being a component part of a great university, the Faculty recommended to the Trustees the inclusion of a pre-engineering program of work in Columbia College covering the basic sciences—mathematics, physics, chemistry, mechanics—and the social-humanistic fields. Twenty-five years ago our School opened its doors for the academic year 1914–15

in a world then seething in the cauldron of a world war, to offer to the engineering profession this integrated program of studies in the liberal arts, science, and technology. Today, again in a world upset by an approaching cataclysm, the whole profession of engineering and the representatives of our best engineering schools are meeting to discuss changes in engineering education in the United States along the very lines we adopted in 1914.

The most probable result of these widespread studies will be a considerable reconstruction of the engineering curricula to increase and to integrate the social-humanistic studies, retaining the Bachelor's degree for a more basic four-year program, leaving the more advanced professional work for a graduate year toward the Master's degree. This is in effect just what our own program has developed into during the twenty-five years since its adoption in 1914.

The academic year 1939–40 will then be marked in the future as the turning point in engineering education in the United States—a turning point away from specialization on technological subject matter in the basic four-year programs toward the inclusion of an integrated stem of social-humanistic studies which will tend to make the engineer of tomorrow a more rounded man and citizen.

Engineering education is not ready even yet to place itself on a strictly professional level for all students, and probably wisely so. Until the basic college education of this country offers the opportunity for a proportion of its work in the field of applied science, there will be large numbers of students who will take the four-year broadened program of engineering. Some of these students will desire this program, not as a preparation to enter the profession of engineering, but as the best general education offered to enter into the problems of business and industry in this highly mechanized civilization we have built. The engineering fraternity is constantly widening its scope of activities while the engineering profession—a much smaller group within the larger fraternity—is becoming more and more technical.

Therefore we see today engineering education continuing to veer away from the highly specialized, narrowly technical programs of instruction so characteristic of the 1920s, toward programs of instruction of broader bases in the scientific-technological and humanistic-social fields. Whether

these new programs divide into our pattern with pre-engineering in the College followed by professional school, or whether they remain entirely in the one school, running the two stems in parallel, means relatively little. The big thing is that engineering education is about to make a long step forward in this next decade.

Our colleagues in Columbia College who have conceived and built an "integrated stem of social-humanistic studies" in our contemporary civilization and humanities sequences should feel gratified that the very heart of their program is the essence of the Society for the Promotion of Engineering Education committee's report. Again, it makes no essential difference to these two important sequences whether they are concentrated in the first two years or are run throughout the four years in parallel with the scientific-technological material. There are advantages to each way of doing it. Columbia College has pioneered the way of an integrated program, blending so successfully the essential elements of an adequate stem of social-humanistic studies into these courses. I venture to believe that our programs in contemporary civilization and in the humanities will prove to be starting points from which many an engineering school faculty will prepare its outline for this group of studies. I also venture the assertion that some additional emphasis in our own Columbia College sequences on the "parallel and interacting growths of science and engineering on the one hand and social organization on the other hand" will improve our offering.

It is not beyond the realm of possibility that our colleagues will also come to recognize that they might strengthen and vitalize their liberal arts curricula by calling together a committee of science and engineering department representatives to work out an integrated program of a non-mathematical "contemporary science and engineering" to be required of all non-science majors for the A.B. degree. This civilization is becoming more and more technological, and in the not distant future no man will be considered as broadly educated and cultured who does not understand at least the technological fundamentals upon which society is based. Possibly here is another area in which Columbia may pioneer the way.

sibly here is another area in which Columbia may pioneer the way.

Will this movement in engineering education have any appreciable effect upon our school? I believe it will and in two directions. First, it will be necessary for us to examine critically our own four-year engineer-

ing programs to ascertain if we are properly adjusting them to meet this new situation. Previously it has been a natural division point on the road to our professional or Master's degree. Now it must become an end-point for some men, an end-point which gives a well-rounded basic education without specialization in any particular subfield of any professional division. There is some question whether or not this four-year program should remain under departmental control.

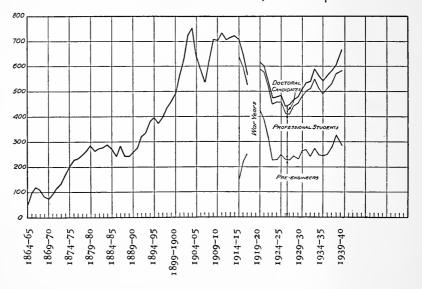
In the second place, this movement will mean a natural increase in graduate work in engineering in those schools equipped to give such instruction and favorably located with respect to great centers of engineering employment. On both these counts we are fortunate, but we must study the situation and be prepared to increase our programs of work in the proper directions. The broadened Bachelor's degree means that young engineering graduates in the future will not have had some of the specialized instruction along technological lines. These graduates will be seeking such instruction part time while they are working in this metropolitan region. This means that we must materially expand our advanced course offerings in the evenings and on Saturday mornings. We will probably have to repeat many of the same courses given to our daytime advanced students in the evenings, on Saturdays, and in Summer Session, and add other courses (which can also be offered at night to our daytime students). This trend toward graduate study in the metropolitan region has been discussed in previous reports as far back as 1931. The future will bring even more of this to us if we are prepared to meet the problem and if our department staffs coöperate.

That the number of pre-engineering enrollments in Columbia College is relatively steady shows clearly on the chart. The entering freshman group of pre-engineers constitutes as large a proportion of the limited freshman class as could be considered for any one professional school in the University. There has been and is no desire to discriminate against engineering freshmen, but the Office of University Admissions and the Columbia College administration must seek to maintain a reasonably balanced complexion of student interests within the College. This has limited the numbers entering the first year of the School of Engineering from Columbia College to approximately eighty to one hundred.

To illustrate the growth of graduate professional work and to show the

enrollment of all students in engineering there has been prepared the following chart:

ENROLLMENT IN ENGINEERING, INCLUDING GRADUATE
AND PRE-ENGINEERING STUDENTS, SINCE 1864



The increases in enrollment have been in the groups of professional students and doctoral candidates, and in these groups, of students who had attained their Bachelor's degree elsewhere, coming to us for graduate work. Attention has previously been directed to the fact that properly to care for this increased enrollment in graduate professional work we must have more space and equipment than to care for a similar number of undergraduate students. The need for additional space for laboratories becomes more acute each year. We have placed mezzanines in many of our older laboratories to utilize the cubage more effectively, but this has proceeded as far as it can be done. We have revamped several of our laboratories to make the equipment movable so that only those pieces in actual use need take up floor space. We have made laboratories and research rooms out of storage spaces. We have reached the end of such expedients.

If we are to progress as a professional and graduate school we must have additional, properly planned space.

Since our last report we have suffered losses in our Faculty through deaths and retirements. The untimely death of Dr. William Campbell, Howe Professor of Metallurgy, removed from our ranks a loyal comrade, a great teacher, a valued researcher, and a dear friend. Ever an enthusiastic alumnus, Dr. Campbell's life was wrapped up in the School of Mines, the School of Engineering, and Columbia University. His will, when probated, showed his deep affection for Alma Mater in the gift of his entire fortune, subject to a life interest of his mother, for the establishment of the Campbell Fellowships for Scientific Research in the field of metals. Carrying on to the very last in life his outstanding teaching and research, his generosity provides means to continue work in his beloved field of metallurgy for all time to come.

In the death of Dr. Albert Potter Wills, Professor of Mathematical Physics, our Faculty have lost a valued colleague, a notable teacher, and a delightful friend. Early trained in electrical engineering, his life was devoted to the mathematical physics background of electricity. His students will long recall the clear, logical presentations of his lectures which he so meticulously prepared for delivery.

There have been some long-delayed promotions to professorial grades of our junior staff. We are happy to welcome to faculty rank Messrs. Burmister, Garrelts, Harness, Hempel, Kayan, Krieger, Powell, and Walden.

There have been two resignations: Professors William A. Shoudy and James F. Sanborn, and three retirements for age: Professors Daniel D. Jackson, Ralph H. McKee, and William S. Ayars.

Special committees of Faculty and alumni have been appointed to study the problems imposed upon some of our departments by retirements and deaths. The sudden death of Professor William Campbell and the approaching retirement of Professor Kern caused the special committee on metallurgy to be extremely active. It has reviewed the offerings of the Department, made suggestions for changes and improvements, and assisted in the selection of personnel to fill the vacancies. Also, in chemical engineering, the special committee was actively engaged during the past

year due to the retirement for age of Professors Daniel D. Jackson and Ralph H. McKee. In electrical and mechanical engineering the special committees are to be appointed this fall because of the approaching retirements for age of Professors Slichter, Lucke, and Arendt. To all the members of these committees the School owes a deep debt of gratitude for their loyal service to the University.

The celebration of the seventy-fifth anniversary of the founding of the School of Mines will take place this fall. All the plans are completed and the Alumni Homecoming at Camp Columbia will take place in August. Unless the threatened war in Europe occurs, the School will be host to the Institution of Civil Engineers of Great Britain, the oldest engineering society, in early September. The Chandler Medal will be presented to an outstanding chemical engineer, a graduate of our own department. There will be a long series of technical meetings during October and early November. The entire laboratories of the School and affiliated science departments will be open to alumni, parents of students, and the general public for three days. There will be a University Convocation with presentation of greetings from eight engineering societies and addresses by presidents of two of our sister institutions, followed by a banquet at the Waldorf-Astoria with addresses by a distinguished alumnus, now the ambassador of his country in Washington, by the president of another sister institution, and by our own University President.

To the committees of staff and alumni who have worked assiduously to perfect all the details for this celebration, the School and the University owe a debt of gratitude. When the gavel falls on the last of these occasions we shall have fitly honored the vision of the founders of our School of Mines, the long line of Faculty who have carried the work forward during the seventy-five years, and the alumni who, entering as callow students, have gained training, knowledge, and inspiration which have led them to distinguished positions in the field of engineering. We cannot rest on our laurels. We must, through the commemoration of this anniversary, gain wisdom and inspiration to strive for ever higher levels of service and accomplishment.

Respectfully submitted,

J. W. Barker, Dean

# FACULTIES OF POLITICAL SCIENCE, PHILOSOPHY AND PURE SCIENCE

#### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

I have the honor to submit the following report on the work under these Graduate Faculties in the academic year 1938–1939.

The Committee on the Degree of Doctor of Philosophy, appointed by the President in November, 1936, made its final report on April 21, 1938. This stimulating report was at once sent to each member of the three faculties, and faculty discussions of the report were begun shortly after the opening of the Winter Session. These discussions proceeded in a series of three or four informal evening meetings of the members of each faculty, the results of the discussions being correlated and formulated between meetings by the Committee on Instruction of each faculty. Finally in March, 1939, the Joint Committee on Graduate Instruction was able, from records of the informal actions by the membership of the three faculties separately, to formulate a series of resolutions bearing upon topics of the report, on which it appeared that the three faculties could come to common agreement. These resolutions were considered and adopted by each of the three faculties at its regular March meeting. Certain other points of the report were acted on by the faculties separately, in additional resolutions.

The Committee making this report on the degree of Doctor of Philosophy worked under the chairmanship of Professor Frederick J. E. Woodbridge, the other members being Professors Dino Bigongiari, Leslie C. Dunn, John R. Dunning, Austin P. Evans (for the second year), Isaac L. Kandel, Frank G. Moore, Ralph L. Rusk, Vladimir G. Simkhovitch, Harold C. Urey, and William L. Westermann (for the first year).

The main conclusion reached by the Committee was that if the degree of Doctor of Philosophy,

is to represent on the part of its recipients the general and specific knowledge, the intellectual maturity and independence, and the promise of continued activity in the dissemination and improvement of knowledge which characterize those who devote their lives to the advancement of learning, it is necessary, under existing conditions, to exercise greater discrimination than at present in the selection into a special group within the total graduate registration, and to make special provision for them.

The recommendations of the report were therefore directed toward achieving better discrimination in the selection of candidates for the Ph.D. degree and toward providing special opportunities for these candidates.

Some of the principal recommendations were the following: that admission to graduate study of a prospective candidate for either the Master of Arts or the Doctor of Philosophy degree should be based on the results of an examination, the type of examination (written, oral, interview) being determined by the department primarily concerned; that an association to be known as Doctoral Candidates should be created, election to which would signify recognition of the student as a doctoral candidate by the Faculties; that there should be set up a Committee on Doctoral Candidates to consist of the President of the University, the Dean, an executive secretary of the Committee, nine other members elected by the three faculties, and one representative chosen by the doctoral candidates; that this committee should be charged with electing the doctoral candidates upon nomination originating with the members of the student's department of major interest; that a student should be eligible for first election only if he can assure his department that during his first year as a candidate he will be able to devote himself primarily to his studies and not be a parttime student; that continuation of candidacy should be contingent upon annual re-election; that the number of doctoral candidates from a department should not exceed a certain number to be fixed by the Committee on Doctoral Candidates in accordance with the resources of the department in staff, space, and equipment; that the Committee should be charged with maintaining the Association of Doctoral Candidates as an active organization for scholarly fellowship among the candidates; that the Committee should make the nominations for appointment to fellowships; that as a means of promoting science and scholarship the condition under which doctoral candidates and prospective candidates work should be ameliorated by increased stipendiary aid; that from revenues of the University now devoted to fellowships, scholarships, and assistants, from money that may be saved by economies, and from an endowment to be sought for the purpose, fellowships be provided in sufficient number to make it possible for all doctoral candidates to devote themselves almost wholly to their studies; that every holder of a fellowship should be available to perform certain services in connection with instruction and research in the University to the extent of not more than ten hours per week; that a flat annual tuition fee be set for candidates instead of a point fee; that numerous scholarships covering room, board, and tuition should be made available for selected first year graduate students; finally, that the University should guard against the dangers "of regarding vacated or newly created positions as opportunities for routine promotion or for rewarding long service"; that an appointment to the grade of professor should be made with especial care after reference to a committee appointed ad hoc by the President; that nomination for an appointment to the grade of assistant or associate professor should be referred to a special committee to be elected annually by the faculty concerned.

The Faculties were not able to convince themselves that some of the more novel recommendations of the report should be adopted, such as the recommended centralization of the election of doctoral candidates in the hands of a committee of the three faculties, and the recommended prominence of the proposed Association of Doctoral Candidates, yet there was general agreement with the prime objectives of the report, namely, to bring about a more careful selection of graduate students, and especially of doctoral candidates, and to provide better opportunities for their scholarly progress. The identical action of each of the three faculties at its March meeting consisted in adopting regulations and recommendations that look to better administration rather than to a significant change of the framework of legislation by the Faculties and the University Council as to the requirements for the degree of Doctor of Philosophy. This legislation appears to have been so soundly conceived under the leadership of Dean Woodbridge in 1916, that the Faculties believe that advances can

be made most surely by administrative procedure, without fundamental change of the general scheme of existing legislation.

The discussion stimulated by the report was healthy and lively. It will bear fruit through the increase of attention of the members of the Faculties to the problems as formulated, no less than in the formal actions and procedures of the Faculties.

The action taken by each of the Faculties at its March meeting was as follows:

After full consideration of the report submitted by Professor Woodbridge, as chairman, in behalf of the University Committee on the Degree of Doctor of Philosophy, the Faculty favors the following regulations and recommendations.

## A. Initial Selection of Students

1. An applicant may be admitted as a regular graduate student only after he has satisfied, in addition to the general University requirements for admission, any further requirements which may be specified by the Department of his major interest, and which may relate especially to the content and the quality of his prior studies and to his ability in the use of foreign languages; such further requirements to be administered by the Department concerned in coöperation with the Director of University Admissions.

2. A Department shall have power, under the jurisdiction of the Faculty, to apply additional tests at any time, in examinations or otherwise, in order to determine whether a regular graduate student already admitted shall continue as a prospective candidate for an advanced degree.

3. Every Department shall be requested promptly to review its requirements for admission and to report any proposed revisions to the Committee on Instruction of the Faculty.

## B. Matriculation for the Degree of Doctor of Philosophy

1. Not unmindful of the regrettable delays now common in the process of matriculation, the Faculty favors the matriculation of acceptable candidates for the degree of Doctor of Philosophy at the earliest feasible time after the completion of the first year of graduate study.

2. In the conviction that the process of matriculation needs a more careful scrutiny, the Faculty resolves to prepare, on the basis of preliminary studies by the several Departments, appropriate regulations for the matriculation of candidates for the degree of Doctor of Philosophy; such regulations to be communicated to a committee composed of representatives of the three graduate Faculties.

- 3. Continuance of candidacy for the degree of Doctor of Philosophy on the part of the matriculates shall be subject to annual review by the several Departments for report to the Dean not later than May 1 in each year.
- 4. The Faculty favors any feasible method which would serve to increase the proportion of matriculates devoting their full time to study; and to this end, in particular, it would desire to utilize mainly for the support of such matriculates the funds for which it makes appeal immediately hereinafter.

## C. Scholarships and Fellowships

1. The Faculty urges the pressing need of funds for the creation of additional scholarships and fellowships for carefully selected candidates for the advanced degrees; and in indication of the goal toward which it believes the University should move as rapidly as possible, it would favor the establishment of about 150 additional fellowships, of an average value of \$1,000, for doctoral matriculates; of about 50 additional scholarships, of a value from \$500 to \$1,000, for entering graduate students (though renewable); and of an increase of about \$15,000 annually for grants-in-aid toward tuition. In the hope of the Faculty, these sums might eventually be supplied from a special fund to be secured for this specific purpose.

#### D. Tuition Fees

1. The Faculty favors a fixed tuition fee of \$375 a year for full-time graduate students, with a total tuition fee of \$750 for the degree of Doctor of Philosophy, and with the retention of the point system for determining the fees of part-time students; and in this connection the Faculty recommends a careful study of the proper definition of residence on the part of a student, and of the proper methods by which residence may be certified for credit.

# E. Appointments in the Faculty

- r. The Faculty recommends that every departmental or other nomination for appointment to the grade of Professor in its rank shall be referred for consideration and recommendation to the Committee on Instruction, or, at the discretion of the Advisory Committee on Educational Policy, to a committee to be appointed *ad hoc* by the President.
- 2. The Faculty recommends that every appointment to the grade of Assistant Professor or Associate Professor which may directly or indirectly affect its work shall be referred for consideration and recommendation to the Committee on Instruction or to a special committee to be elected by the Faculty.

One of the main recommendations of the Committee on the Degree of Doctor of Philosophy was that more significance be given to the formal

recognition as candidates for the degree of Doctor of Philosophy of those graduate students who, after a year or more of graduate study, usually two years or more, have, after passing departmental tests, been recommended to the Dean for matriculation as candidates qualified to undertake research and to proceed with fulfillment of the requirements for the degree. In some departments the recommendation of students for matriculation as candidates has heretofore been withheld until the student has met all requirements except completion of his dissertation and passing the final oral examination. The Faculties now urge matriculation of candidates in their second year as graduate students, both for the encouragement of the students of recognized ability and in fairness to some who should not be encouraged to spend more time in trying to attain the Ph.D. degree. The length of time a student remains a candidate before he completes the requirements for the degree also varies greatly from one department to another. In fields requiring laboratory research the student is likely to proceed without interruption to the completion in a University laboratory of the research that will constitute his dissertation. In subjects such as history or English the student is more likely to complete his dissertation only after several years following his entering upon the duties of a teaching or other position. The following is a list of departments or subjects followed in each case first by a figure indicating the number of matriculated candidates in that field at the end of this year, and then by a second figure showing the number of Ph.D. graduates this year in that field: Anatomy 7, 1; Anthropology 6, 2; Astronomy 0, 0; Architecture 1, o; Bacteriology o, 2; Biochemistry 3, 9; Botany 3, 0; Business 40, 8; Chemical Engineering 12, 4; Chemistry 92, 19; Chinese 3, 0; Civil Engineering 1, 1; East European Languages 10, 0; Economics 141, 9; Educational Research 227, 48; Electrical Engineering 3, 0; English and Comparative Literature 33, 16; Fine Arts 1, 0; French 24, 3; Geography 6, 0; Geology 16, 6; German 18, 2; Greek and Latin 6, 2; History 155, 18; Indo-Iranian and Comparative Linguistics 3, 0; Industrial Engineering 3, 0; Italian 6, o; Mathematics o, 4; Metallurgy 1, 1; Music 1, 0; Philosophy 28, 6; Physics 27, 3; Physiology 2, 2; Psychology 21, 12; Public Law and Government 50, 9; Semitics 5, 0; Sociology 55, 4; Spanish 3, 1; Zoölogy 11, 6.

The Columbia University Council for Research in the Social Sciences, set up in 1925 by the University Council, has for fifteen years been in

charge of one of the major research undertakings of the University. This Council has been supplied with funds averaging approximately \$100,000 a year. Gifts from the Rockefeller Foundation have constituted about 67 percent of these funds, gifts from various donors about 25 percent, appropriations by the University about 7 percent, and royalties from publications about 1 percent. One hundred and twenty-seven separate research projects have been maintained through allotments by the Council. About 76 percent of the expenditures have been on the salaries of research assistants, 12 percent on expenses of travel in connection with researches, 4 percent on office expenses, and 8 percent on publications and miscellaneous expenses. A reserve has been set aside to take care of the publication of results of investigations now being completed. No stipends were paid to members of the University staff who engaged in the direction or in other work of these investigations, nor did Ph.D. candidates work on these projects for their dissertations.

After guiding for more than twelve years this large, varied, and expensive program of research, the Council on Research in the Social Sciences undertook to make through a subcommittee under the chairmanship of Professor James C. Bonbright, a careful examination of the probable value of the results obtained from the research projects supported through the Council, and a critical study of the effectiveness of the policies and practices of the Council. The report of the Bonbright committee has been presented to the Council for Research in the Social Sciences, accepted by it, and will be transmitted to the University Council. While admitting the great difficulty in evaluating results, the report concludes that the published output under the Council for Research in the Social Sciences is "not merely a creditable, but a notable record of accomplishment in the field of social science research....that such a record would compare favorably with that of any other agency for research in the social sciences, financed by funds of similar amount."

As to the plan and administration of research under the Council, the report offers specific and constructive criticism, urging greater effort to conceive and arrange researches of fundamental import in the social sciences that will enlist the enthusiastic interest of individual faculty members in a joint attack on problems broader than the scope of single University departments. It does not by any means advise that grants-in-

aid for individually directed researches be given up. Several proposals as to improved organization of the Council are presented, including a revision of the membership of the Council itself.

This study that the Council has made of its own work has come at a time when it is obvious that the Council must be prepared to meet a new situation and probably to operate on new lines. The Rockefeller Foundation contributions, according to schedule, will come to an end on June 30, 1940. If the scope of research of the members of the Graduate Faculties is not to be sadly curtailed it will be necessary to secure new support. Problems of social science are as vital as any, and if valid prospects can be presented of increasing knowledge in this field, they should be able to attract the financial support necessary to meet the expenses of such researches. The University itself will, of course, continue, by the maintenance of its staff of professors and junior officers, to give the largest and most essential support to researches at Columbia in the field of the social sciences and will thus insure the securest foundation for the effective use of supplementary funds.

For the second year a "General Record Examination" for all newly admitted graduate students was given in October, 1938. This is an educational testing experiment undertaken jointly by the graduate schools of Harvard, Yale, Princeton, and Columbia, made possible by the aid of the personnel and by the financial assistance of the Carnegie Foundation for the Advancement of Teaching. The test as in the previous year consisted of numerous questions, to which the answers could be rapidly indicated, in the chief fields of undergraduate study. So far, any conclusions must be only tentative, but it does appear quite clearly that an examination of this type would be most valuable if it could be taken by seniors, in all undergraduate colleges, who are considering continuing their studies in graduate schools. The score of a student, with appropriate interpretation, would indicate to the student himself what his mental equipment toward the end of his undergraduate study appeared to be relative to that of other prospective graduate students, and what, with proper account taken of his own zeal, ambition, and circumstances, would appear to be his chances of success in scholarly work. For graduate schools the scores of applicants for admission would give a better basis of comparison than is now available, and would greatly aid admissions officers and also the administrative officers or committees that have to decide which applicants should receive special encouragement by some form of financial aid.

Experience with the first of these General Record Examination tests as given in October, 1937, led to a strong plea by various departments of instruction that besides the general group of tests in six or more important subjects of undergraduate study the entering graduate student should have a more advanced examination in the subject in which he expects to work as a graduate student. For example, the Department of Mathematics would like to see the performance of entering students of mathematics on a more advanced type of mathematics examination than could reasonably be tried by students in general. The preparation of such advanced examinations is a large task, but it has been undertaken and next October the tests will include an advanced examination, of a grade appropriate for a student who has had an undergraduate major in the subject, in each of some twelve subjects.

It is appropriate to express here on behalf of the three faculties their thanks and appreciation to the graduate students for participating in this experiment by taking the examination, and especially to the members of this and the other three universities who have generously used their skill and given their time and effort to devising the tests.

Our graduate students and faculty members had the privilege this year of association with an unusual number of scholars of international high repute in their respective fields who served on our Faculties as Visiting Professors. Solon Buck, Director of Publications, National Archives, Washington, was Visiting Professor of History; J. J. L. Duyvendak, of Leyden, came again as Visiting Professor of Chinese in the Spring Session; Paul Hazard, of the Collège de France, came again as Visiting Professor of French for the Winter Session; Tomás Navarro, of the University of Madrid, was Visiting Professor of Spanish; Friedrich Oehlkers, Director of the Botanical Institute of the University of Freiburg, was Visiting Professor of Genetics; Sir William David Ross, Provost of Oriel College, Oxford, lectured on philosophy from January 1 to April 1; George E. Uhlenbeck, of the University of Utrecht, was Visiting Professor of Physics for the Winter Session; Boris Unbegaun, of the University of Brussels and the University of Strasbourg, was Visiting Professor of Slavonic Philology in the Spring Session, following Max Vasmer, Professor of Slavic Philology and Director of the Institute for Slavic Languages of the University of Berlin, who was here through the Winter Session. Additions to the Faculty of Political Science were: Nathaniel Peffer,

Additions to the Faculty of Political Science were: Nathaniel Peffer, Associate Professor of Public Law. To the Faculty of Philosophy: George Herzog, Assistant Professor of Anthropology; Gilbert Highet, Professor of Greek and Latin; Ralph Linton, Professor of Anthropology; Jeanne M. Varney, Assistant Professor of French; and Kurt von Fritz, Professor of Greek and Latin. To the Faculty of Pure Science: Enrico Fermi, Professor of Physics; George Kimball, Assistant Professor of Chemistry; George H. Walden, Assistant Professor of Chemistry; and Oskar P. Wintersteiner, Assistant Professor of Biochemistry.

An agreement between Columbia University and Teachers College, dated June 8, 1915, with respect to offering the Ph.D. for advanced study and research in the subject of education, provided that the University should maintain under the jurisdiction of the Faculty of Philosophy a Department of Educational Research composed of professors of the Faculty of Education appointed by the Trustees of the University on the nomination of the President and that this department should be charged with the work of instruction and research leading to the degree of Doctor of Philosophy for all candidates for that degree electing education as their major subject. Until action that was taken this year, six professors of education and the Dean of Teachers College were assigned to seats on the Faculty of Philosophy, and these seven members of the Faculty constituted the Department of Educational Research under the Faculty of Philosophy. This small group was theoretically in charge of all Ph.D. candidates in educational research. Actually, this number of professors of education represented only a small fraction of the number of Teachers College professors engaged in guiding the advanced studies and researches of candidates working in the field of education toward the Ph.D. degree. Following recommendation by the Faculty of Philosophy at its November, 1938, meeting the Trustees have reconstituted the Department of Educational Research in the Faculty of Philosophy by assigning to seats on the Faculty of Philosophy, with terms of one to three years, eighteen Teachers College professors who are actively concerned with research in education and with the supervision of the work of candidates for the Ph.D. degree in that field. By these assignments to the Faculty of

Philosophy with limited terms it is expected to bring in turn to seats on the Faculty all the professors of education who have as a primary duty the guidance of Ph.D. candidates. The assignments to the Faculty were as follows: with term to June 30, 1940, Professors Brunner, Clark (H. F.), Jersild, McGaughy, O'Rear, Pintner, and Walker; to June 30, 1941, Professors Engelhardt, Kandel, Mort, Powers, and Reisner; to June 30, 1942, Professors Briggs, Counts, Gates, Evenden, Williams (J. F.), and Strayer.

In accordance with previous custom the registration statistics from the annual report of the Registrar for the year are given here for ready reference. The total registration, including about 300 unclassified graduate students, under the Faculties of Political Science, Philosophy, and Pure Science for the Winter and Spring Sessions of the academic year 1938–39 was 3,178. This compares with 3,077 for the previous year, an increase of 101 students. Including the Summer Session, the total enrollment for the year was 3,647 as compared with 3,479 in the preceding year, an increase of 168 students. The number of new students, in the Winter and Spring Sessions, was 1,262. The number of degrees conferred was as follows: Master of Arts, 516, as compared with 476; Doctor of Philosophy, 199, as compared with 177 in 1937–38.

The ratio of the number of women graduate students to the whole number of graduate students has shown a rather steady decrease for the past decade, from 52 percent in 1929–30 to 39 percent in 1938–39. While the number of men students has remained fairly constant, about 1,700, over the period, the number of women, not including unclassified students, decreased from 1,680 in 1929–30 to 1,114 in 1935–36, and for the present year has been 1,131. The reasons for this decrease are doubtless to be found in economic changes that have taken place.

Respectfully submitted,

George B. Pegram,

Dean

June 30, 1939

### SCHOOL OF ARCHITECTURE

#### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

I have the honor of submitting the annual report of the activities of the School of Architecture for the academic year 1938–39.

The building industry, considered on a national scale, is still quiescent; but in the region of New York, the World's Fair has served as a stimulant to architectural activities. Although construction for exposition purposes does not, and should not, present the same problems as permanent construction, it nevertheless creates situations that require the highest powers of imagination, ingenuity, and initiative. The architect must combine sound planning with fanciful and decorative design; and he must make experiments with new forms, new theories of design, new materials, and new methods of construction which would be too uncertain to incorporate in permanent or utilitarian structures. Whereas the Fair may be far short of perfection, it has, nevertheless, provided an outlet and a laboratory for the imaginative and the inventive architect.

Among the practitioners employed at the Fair, a surprisingly large number have received their training at Columbia, so that the graduates of this School are, to a considerable degree, responsible for its character and appearance. The enterprise, as a whole, does them high credit, for, according to the majority of opinion, the New York World's Fair of 1939 is a great achievement, judged by aesthetic and scientific standards. A partial list of the Columbia alumni who did architectural work at the Fair appeared in the April 28, 1939, issue of the *Columbia Alumni News*, but besides the members of the Board of Design and of the prominent architectural firms, credit must also be given to the many younger graduates who designed a number of the smaller buildings, and who served as associates and draftsmen. Their participation is also important because of the quality and quantity of their work.

The School of Architecture at Columbia University continues to show a relatively low registration, as do all the schools of architecture throughout the country. But considered over a period of twenty-five years, registration at Columbia has been proportionately higher than in other institutions, despite the fact that here, six years of study are required to obtain the professional degree of Bachelor of Architecture, while in the majority of other schools, only five years are necessary.

Registration of students in the School may not increase appreciably until building operations revive. However, farsighted individuals will realize that an increase in building is ultimately inevitable, and that this is the time to choose and prepare for a field of work in which there will be a shortage rather than a surplus of professionals. The general financial condition of the country also affects registrations in the School, because the long hours required of student-architects make it almost impossible for them to do part-time work during the school term. Many are, consequently, very hard-pressed financially, and are greatly in need of assistance through scholarships.

The standard of quality in the School remains high. The problems in design integrate all the specialized subjects that make up the curriculum. Consequently, through the solution of these problems, the caliber of the student and the efficacy of the instruction that he is receiving can readily be estimated. The general average of work has been very satisfactory, while some examples have been outstanding in excellence of design and in thoroughness of conception in structural detail.

The method of teaching construction, whereby the science of structure is integrated with architectural design, is developing constantly. Not only is the system improved by continued experience, but also the method of teaching must be constantly adapted to a subject that is ever in a process of change. The practical aspects of construction are emphasized through field trips, and also through the study of materials, a permanent collection having been assembled in the School. Many interesting samples have recently been added.

The promotion of William H. Hayes to the rank of Assistant Professor is a source of great satisfaction, for his years of teaching the courses in construction have been of the highest value.

With the help of the Carnegie Foundation, courses in planning and housing continue satisfactorily. The value of this work is largely due to the fact that it is not restricted to theory, but includes practical application. For this reason the outside activities of Sir Raymond Unwin (who was again with us as Visiting Professor for half of each session), and of Mr. Carl Feiss, have direct influence upon the work in the School. Serving on advisory committees and collaborating with important activities in planning and housing, both private and Federal, they have been able to bring actual problems into the School and have thus increased the significance of the work produced.

Mr. Carl Feiss has received the appointment of Associate in Architecture, well merited by his enthusiastic and tireless efforts. He will be assisted next year by Mr. Louis B. Wetmore, who is coming to the University from the State Housing Authority in Albany to serve as Instructor in Housing and Planning.

The laboratory of design correlation, under the direction of Mr. Frederick J. Kiesler, continues its work of research and investigation. During the past year the students evolved theoretical conclusions which they applied to designs of practical value, following them through the processes of actual production.

Registration for graduate work in architecture has increased considerably during the past three years. Up to and including the years of largest enrollment, 1929 to 1932, there were rarely more than four to six candidates for higher degrees in architecture, whereas last year there were thirteen. Among them were two Commonwealth Fellows and one Exchange student from the School of Architecture of the University of Rome, Italy. The general level of the work was very commendable, while several of the reports on specialized subjects will have continued value for further research and comparison.

The profession of landscape architecture has suffered the same fate as architecture, causing similar results of reduced registration. The number of students remains adequate, however, and work goes on as usual.

Nevis-on-Hudson continues to function as a center for lectures, classes in horticulture, surveying, and landscape design. It also serves to house many meetings of alumni associations, garden clubs, and other gatherings. Plans for the establishment of the Arboretum at Nevis are also progressing. With these activities as a basis for development, it is expected that Nevis will continue to grow in importance.

The classes in drawing, painting, and sculpture are enjoying a period

of remarkable development, both in number of registrations and in caliber of work produced. There is a constant influx of new pupils, while the older pupils remain, giving excellent evidence of their growing maturity. As these classes were begun only three years ago, a new curriculum had to be formulated which has since evolved into a stable and effective system. This year, two new specialized courses were offered, with satisfactory results: fresco painting under the direction of Mr. Werner Drewes, and wood engraving under Mr. Hans A. Mueller.

East Hall has now housed the classes in drawing, painting, and sculpture for a year, and the new quarters have very adequately fulfilled the special requirements of this work, providing good light, good ventilation, and sufficient isolation so that the constant hammering from the sculptors' studio is not objectionable. For practical reasons, the sculptors must occupy the first floor of the building, but at present only half of this floor is available to them. But the sculpture classes are increasingly popular so that the students are already at a disadvantage for lack of space. It is earnestly desired, therefore, that the other half of the first floor might be made available for their use.

The resignation of Cecil C. Briggs, Assistant Professor of Architecture, is a source of regret to the members of the staff and to the students as well. He is leaving Columbia to become the director of the Department of Architecture at Pratt Institute. For seven years Professor Briggs served as drawing master in the School of Architecture, and took an active part in the successful establishment of the classes in drawing, painting, and sculpture.

Mr. Frank Mechau will come to Columbia as Associate in Drawing, Painting, and Sculpture, and will take over the duties of Professor Briggs. Mr. Mechau has already proved his ability, having held three Guggenheim Fellowships, having achieved success as a teacher in the Colorado School of Fine Arts, and having won a reputation as a distinguished painter.

The Charles T. Mathews Lectures on medieval art and architecture were delivered this year by Talbot F. Hamlin, Avery Librarian, who offered ten lectures at the Metropolitan Museum of Art on "The Development of the Medieval House and Town." Prepared with scholarship and well presented, these lectures drew a large attendance.

Association with the Juilliard School of Music continued for the fourth year. Stage sets and costumes for some of their productions have been designed and executed by students of the School of Architecture.

A new booklet explaining the objectives and illustrating the work of the School has been completed. The last publication of such a booklet was in 1929. Because of the great world changes in architectural design, and the consequent changes in the teaching of the profession, it is very necessary to have a means of showing that corresponding changes have taken place in the School.

Many exhibits of interest were shown by the School during the past year.

# In Avery Hall:

Exhibition of the Association of Intercollegiate Schools of Architecture. (Students' work representing thirty-four member schools.)

Drawings of the five premiated competitors for a Fine Arts Building for Wheaton College in Connecticut. (A national competition.)

Drawings of the five premiated competitors for a general plan and a library for Goucher College in Maryland. (A national competition.)

A collection of photographs of old and modern buildings in Holland, lent by Dr. Ing. D. F. Slothouwer, Professor of the History of Architecture at the Technical High School at Delft, Holland.

Architect's drawings for the Museum of Modern Art recently opened in this city, lent by Mr. Philip Goodwin.

Architecture and city construction in the U.S.S.R., lent by the American Russian Institute.

Two exhibits of student work.

## In Avery Library:

Architectural "classics" selected from the Avery Library collections.

Measured drawings and renderings of old New York buildings made by the Index of American Design of the Federal Art Project, lent by the Federal Art Project.

Original drawings and sketches by Stanford White, 1853-1906, mostly lent by Lawrence Grant White.

The architecture of railroads; selected examples including illustrations chosen from the Parsons Prints.

The secular and domestic architecture of the Middle Ages.

Books and illustrations dealing with gardens and the history of garden design.

Original sketches and architectural drawings by H. Van Buren Magonigle, 1867–1935, from the collection presented by Mrs. H. Van Buren Magonigle, 1938.

Rare and important architectural books in the Avery Library.

# In the Exhibition Gallery, 324 East Hall:

Exhibition of woodcuts and wood engravings by Hans Alexander Mueller. Delacroix drawings (facsimile prints by Alfred Robaut) from the collection of J. B. Neumann.

Drawings, lithographs, and etchings by Diego Rivera, Orozco, Tamayo, Barlach, Carl Hofer, and others.

Photographs and sketches by Thorne Sherwood, Perkins-Boring Traveling Fellow, 1937–38.

Third Annual Faculty Art Exhibition

Mural decorations submitted by art schools and universities for the programs devised by the Mural Painting Department of the Beaux Arts Institute of Design.

Two exhibits of student work.

There have been many guest lecturers throughout the year: Messrs. Ralph Eberlin, Armand Tibbetts, and Hans Heymann spoke on various phases and aspects of planning and housing; Messrs. John D. Graham, Dr. Ashley Montague, I. Rice-Pereira, and Raymond V. Parsons lectured to the students in the laboratory of design correlation; Mr. O. P. Cleaver, Dr. Ing. D. F. Slothouwer, Alvar Aalto, Professor Jean Labatut, and Fletcher Steele delivered lectures to the architects and landscape architects; Messrs. J. B. Neumann, Frederick J. Kiesler, Emily Genauer, Edward Rowan, I. Rice-Pereira, Paul Manship, Ralph Walker, Katherine S. Dreier, Burgoyne Diller, Nathaniel Poussette-Dart, Ralph Pearson, and Talbot Hamlin delivered lectures on various subjects primarily to the students of painting and sculpture, but also to outsiders invited to attend.

Members of the staff have received recognition as follows: Mr. Edgar I. Williams, Associate in Architecture, was one of the architects for the Administration Building at the World's Fair; he has also been elected president of the Architectural League of New York. Mr. John C. B. Moore, Associate in Architecture, was one of the architects of the Building Materials Building at the Fair; he was also placed first in the national competition for Goucher College, Maryland, and was named chairman

of the Committee on Education of the New York Chapter of the American Institute of Architects. Assistant Professor Kenneth A. Smith was connected with the construction of the Dominican Republic Exhibit at the World's Fair and also served on a special board to write examination questions for the Civil Service Commission; Talbot F. Hamlin, Avery Librarian and Lecturer in Architecture, was the author of a series of twelve articles on architectural criticism, published in the magazine, Pencil Points, during the year, and was also the author of a book entitled, Some European Libraries; Their Methods, Administration and Achievements, which is a report on his trip to Europe in 1937, and was published in a series of books sponsored by the School of Library Research. Richard M. Bennett, design critic in the University Extension classes, was the successful competitor in the national competition for a Fine Arts Building for Wheaton College, Connecticut; Carl Feiss, Associate in Architecture, was appointed consultant to the Federal Government and was also in charge of the housing exhibit sponsored by the Citizens' Housing Council of New York at the World's Fair; Sir Raymond Unwin, Visiting Professor, was appointed official delegate from Great Britain to the Fifteenth International Congress of Architects to be held in Washington in September, 1939. William H. Hayes, Associate in Architecture, wrote an article entitled "Structural Requirements for Houses" which will appear in the July, 1939, issue of the Architectural Record; he has also acted as consultant on several architectural problems. Professor Leopold Arnaud was appointed as a member of the Committee on Education of the New York Chapter of the American Institute of Architects, and on the Reception Committee of the Fifteenth International Congress of Architects.

It has been our desire to commemorate the names of former members of the Faculty by appropriate medals awarded in competition for short problems. It was gratifying, therefore, to be able to establish a medal in memory of Professor Alfred D. F. Hamlin, made possible by a gift from Mr. John S. Appleby, an alumnus of the School. A finely composed portrait medal was designed by Miss Genevieve Kerr Hamlin, sculptress and daughter of Professor Alfred D. F. Hamlin. The award of the first medal was made to Mr. Vincent Kling by Mr. Talbot F. Hamlin, son of Professor Hamlin.

It is hoped that a medal for the Frank Dempster Sherman competition will soon be available, as there is already a contribution of \$100 given by Mr. Henry Hopkins, Architecture '14, who studied under Professor Sherman.

Enrollment for the School during the year 1938–39 was as follows:

Candidates for the Bachelor of Architecture degree			43
Candidates for the Master of Science in architecture degree			13
Special students in planning and housing			2
Special students in the laboratory of design correlation			5
Landscape architecture			183
Drawing, painting, and sculpture			142
University Extension classes in architecture			138

Despite the comparative dearth of building activities, the graduates of this School have had little difficulty in obtaining employment, while several of the graduate students were given positions of responsibility. The majority of the undergraduates were also able to obtain employment in offices during the summer.

Fellowship and prizes were awarded as follows:

Schermerhorn Traveling Fellowship: William S. Brown, M.S., '35.

American Institute of Architects' Medal: Sylvia Shimberg.

Alumni Medal: Sylvia Shimberg.

New York Society of Architects' Medals: Daniel Brenner and Sylvia Shimberg.

Alpha Rho Chi Medal: Daniel Brenner.

Boring Medal: Ignacio Navarrete. Hamlin Medal: Vincent Kling. Warren Medal: Albert Kennerly.

Henry Wright Prize: Hayden Johnson.

Sherman Prize: Arnold Eckhoff. Illumination Prize: Carl Stover.

Respectfully submitted,

Leopold Arnaud,

Dean

June 30, 1939

# GRADUATE SCHOOL OF JOURNALISM

# REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

I have the honor of submitting the annual report of the Graduate School of Journalism for the academic year 1938–39.

In place of the customary annual review of journalism in relation to the Graduate School of Journalism, I shall include three documents which should be recorded as contributions in the development of education in journalism.

- I. The first report relates to the course of study given by Professor Douglas Southall Freeman. The questions are frequently asked: "How do you teach journalism?" and "What do you teach in a Graduate School of Journalism?" A comprehensive reply to these questions would require a survey of all courses of study throughout the week. Professor Freeman's report is included as an answer, in part, to these questions.
- 2. Professor Eleanor Carroll presents an informative and important study of the academic records and the professional activities of the women members of the Classes of 1937, 1938, and 1939. The three-year record of the Graduate School provides valuable source material for those who are interested in the facts relating to the opportunities and the progress of women in the profession of journalism.

Professor Carroll's report is included as, in part, an answer to the question also frequently asked: "What happens to the women graduates of your School?"

3. In order to obtain information regarding financial needs of future students, Professor Elmo Roper made a nation-wide survey of student opinion in fifteen universities of the desirable and practical methods of financing their education. Because of our limited scholarship funds we are confronted each year with the necessity of assisting students by obtaining part-time employment or recommending University loans. Professor Roper's statistical data are submitted as an indication of how

modern research methods may be used to determine policies in relation to student aid and financial guidance and also because of the value of the findings.

In recent years we have operated on the basis of one course of study each day, with the exception of Wednesdays, which have been reserved for special lectures, conferences, and seminars. As an indication of the subject matter, content, and organization of the lectures and assignments, for one day only, I am including the outline submitted for the academic year 1939—40 by Professor Freeman. This report reveals the thorough organization of Professor Freeman's course, the wide range of his lectures and their relation to student assignments. Professor Freeman requires each student to submit a written report every day. Frequently, this classroom work is published on the editorial page of the Richmond (Virginia) News Leader, or the students have opportunities of publishing their papers elsewhere. Professor Freeman's course, Journalism 219—220, is scheduled for Tuesdays from 8:15 a.m. to 5 p.m. His report, outlining the general aim of the course, procedure, and schedule of his lectures, follows:

The course has three general aims: first, to widen and to deepen the informational and critical background through which students will approach editorial duties; second, to equip them for work as beginners in all phases of newspaper editorial work except copyreading and head-writing; third, to acquaint them with the new editorial techniques and solid methods of research so that, after they have gained practical experience as beginners, they can hope for advancement.

The general procedure of the course is designed to combine ample practice writing with individual conferences, class criticism, exacting copyreading, and lectures. As a rule, four hours of writing and three hours of lectures are scheduled for each Tuesday. The fourth hour of the day is devoted to the reading and criticism in class of individual or group papers. After the class gets under way and is less timid about composition, conferences are held at 8:15 for detailed discussion of the finer points of composition.

From October 3 through October 24 the first hour of the day is devoted to the explanation of the rules that should guide students in the selection of editorial topics. They are acquainted with the principles of news evaluation and are told how they should go about testing the daily news to see if, and why, it deserves to be made the basis of editorial comment.

In the second morning hour of the same period, students are given a detailed review of research methods, which is nothing more nor less than instruc-

tion in "how to look things up," so that when students are called to handle any editorial topic with which they are unfamiliar, they will know how to proceed. The emphasis here is on the practical principle, "It isn't what you know that counts, but knowing how to find out." When this part of the course ends, the students have a working newspaper bibliography and have had their preliminary training in the use of newspaper source materials.

These preliminary courses lead, on October 31, to actual editorial writing. The students are divided into various editorial boards of differing politics and geographical location and are to prepare editorial pages. The editor-in-chief of each group changes weekly so that each student has a chance at the assignment of topics and leadership in at least one editorial conference. This course ends December 19. The different editorial pages, while carefully copyread, are, in addition, reviewed in the last afternoon hour of each Tuesday from October 31 to December 19.

Simultaneously with this course in editorial writing, and as the logical development of the study of research methods, the students on November 14–28 consider during the second morning hour the history and the detection of propaganda. This is based on the instructor's own collection of modern propa-

ganda materials, most of which date from the rise of Hitler.

On October 31, the last lecture date before the general election, the second morning hour is devoted to editorial election technique—the methods to be employed in the early collection and swift statistical interpretation of election returns. Following this lecture and the course of propaganda comes, from December 5 to January 23, a series of lectures on how an editorial writer is to get and is to interpret Washington news and Government documents. The detailed topics are on the schedule submitted September 25. The editorials of this period deal exclusively with national affairs and employ the methods explained in the lectures. This period prior to and during the opening weeks of Congress is regarded as one of much importance in acquainting students with editorial problems which they will have to face through the whole of their professional careers.

In the fear that students graduating this year will be compelled to deal with the editorial problems of war, a special course is included for the first afternoon hour on the various editorial problems of handling war news. Detailed topics have been submitted. They range from the study of the censorship to the editorial use of maps and the editorial interpretation of battles and campaigns.

In preparation for Mr. White's course in radio, the students during January have a three-weeks' course in radio script writing and have their voice tests made. The second afternoon hour is devoted to the reading, preferably through a public-address system, of the radio script the students have prepared during the morning. The emphasis is on the avoidance of unhappy consonantal troups and sounds not suited to radio.

Broadly speaking, the Spring Session is devoted to practical studies of new editorial techniques so that, when a student gets a job and has established himself, he may have the means of advancement. In the rearrangement of this course, it has been thought wise to reduce the time devoted to the preparation of weekly reviews and to give to these one month only. The scope of other digests, the technique of condensation, departmentalization, etc., are listed in detail in the schedule. Two months are given to the editorial technique of sketches, obits, and supplements on which young newspaper men and women frequently are employed. The hope is to give each student such preparation in this somewhat unpopular work on a newspaper that he can use it as a means of getting on. Afternoon hours, as in the Winter Session, are devoted to the detailed criticism of students' papers.

Because there is a growing demand for men to conduct special investigations and to undertake newspaper crusades, this course, which was not given in 1938-39, has been restored for the second afternoon hour from February 20 through March 12. The aim is to equip men for these special investigations and to drill them in the effective technique of reiteration and illustration. It is hoped that a few of the students who show special aptitude for this work will procure positions as special investigators, broadly similar to those the instructor has had on the editorial staff of the Richmond *News Leader* since 1927.

Four afternoon hours, late in the session, March 26-April 16, have been set aside for a review of newspaper ethics.

The annual lecture on job hunting has been moved up to February 13, as experience shows that students begin about that time to search for employment.

Date	First Morning Hour 9-9:50	Second Morning Hour 9:50-10:40	First Afternoon Hour 3-3:50	Second Afternoon Hour 4–5:30
October 3	Introductory	Research methods	Editorial appraisal of censorship	Students' war re- ports reviewed
October 10	News evaluation	Research methods	Editorial critique of communiqués	Students' war re- ports reviewed
October 17	News evaluation	Research methods	Editorial problems of neutrality	Students' war re- ports reviewed
October 24	News evaluation	Research methods	Editorial problems of neutrality	Students' war re- ports reviewed
October 31	Editorial writing	Editorial election technique	Editorial treatment of war eco- nomics	Students' war re- ports reviewed
November 14	Editorial writing	Detection and fil- tration of prop- aganda	Editorial treatment of blockade and contraband news	Students' editorial pages reviewed
November 21	Editorial writing	Detection and fil- tration of prop- aganda	Editorial use of war maps	Students' editorial pages reviewed
November 28	Editorial writing	Detection and fil- tration of prop- aganda	Editorial appraisal of rumor and atrocity stories	Students' editorial pages reviewed

Date	First Morning Hour 9-9:50	Second Morning Hour 9:50-10:40	First Afternoon Hour 3-3:50	Second Afternoon Hour 4-5:30
December 5	Editorial writing	Editorial treatment of Congress	Editorial treatment of war govern- ments	Students' editorial pages reviewed
December 12	Editorial writing	Editorial treatment of Congress	Editorial reviews of battles	Students' editorial pages reviewed
December 19	Editorial writing	Editorial treatment of Congress	Editorial review of campaigns	Students' editorial pages reviewed
January 9	Radio editing	Editorial treatment of presidential messages	Radio voice tests	Radio editing re- viewed
January 16	Radio editing	Editorial treatment of U.S. budget	Radio voice tests	Radio editing re- viewed
January 23	Radio editing	Editorial use of Government documents and handouts	Radio voice tests	Radio editing re- viewed
February 13	New methods of ed	itorial technique	Job h	unting
February 20	New methods of co	ndensation	Review of conden- sation reports	Technique of edi- torial crusades
February 27	Newspaper departm	entalization	Review of depart- mental reports	Technique of edi- torial crusades
March 5	Preparation of daily	digests	Review of daily digests	Technique of edi- torial crusades
March 12	Background of wee	kly reviews	Review of reports on weekly re- views	Technique of edi- torial crusades
March 19	Preparation of week	aly reviews	Review of weekly re	eviews
March 26	Preparation of week	cly reviews	Review of weekly reviews	Newspaper ethics
April 2	Preparation of week		Review of weekly reviews	Newspaper ethics
April 9		Sketches and obits	Review of sketches and obits	Newspaper ethics
April 16	Editorial technique	Sketches and obits	Review of sketches and obits	Newspaper ethics
April 23	Editorial technique ments	of special supple-	Review of special st	upplements
April 30	Editorial technique ments	of special supple-	Review of special st	applements
May 7	Editorial technique	of annual reviews	Review of annual re	eviews
May 14	Preparation of annu	1al review	Final lecture and ce	eremonies

2

Professor Carroll's report, which follows, begins with a quotation from the Announcement of the Graduate School of Journalism: "Women will be admitted to the School in numbers proportionate to the opportunities which shall develop for them in the future in professional work."

When a policy is followed for some time, it is reasonable to examine its working. Hence the background of the women graduates of the past three

years (1937 to 1939 inclusive), their record in the School, their placement in the working world, and their achievement both professional and economic have been subjected to the following critical study.

This report merely suggests a pattern for tabulation and statistics to be continued from year to year. Two and a half years is the greatest length of time any of these women have been employed since graduation. Their professional careers are too new, their number too limited, to permit a widely significant investigation. It is made in the belief that the early currents of a stream destined to gather a real momentum should be charted.

In the three classes herein analyzed, women averaged about one quarter of the total annual enrollment. Out of the forty-eight women admitted in the last three years, five withdrew or were failed for professional or academic reasons. Fifteen women were graduated in the year 1937, eleven in 1938 (plus one special student who completed the year with honor), and sixteen in 1939.

Let it be noted that there is no difference in the School's basis for selection between men and women applicants. In every case the deciding factors are an indication of aptitude for journalism, academic record, personality, health, and the intangibles which in class formation make for rich and varied total ex-

perience.

Background of the three classes.—The background of the forty-three women here under consideration is summarized in the following tables, 1–11. This composite picture is not to be regarded as a pattern of the School's preferences, though the small general increase in the students' ages at time of registration has, by and large, proved desirable. Delayed graduate work brought advantages in some cases, but no policy is to be implied from the figures. A wide geographic and educational range is not only in the best interests of a graduate professional school, but also of the student body. New York is only accidentally the leader among home states; Wellesley College ranks first for its graduates admitted, probably because of the School's sustained contacts with faculty and student body there.

The preponderance of the Bachelor of Arts degree is natural. The preponderance of the English major, if not unnatural, is certainly undesirable, since substance and subject matter are becoming increasingly the basis for employment in the field of journalism. Political science, world history, economics, sociology—these are the types of majors which prove of greatest future service. Courses in writing and literature are essential, but not to the exclusion of present-day problems. Experience with students offering journalism majors contains a warning against this choice of undergraduate concentration, because its practicalities limit the time available for study in the basic fields.

The totals showing extracurricular journalism and previous newspaper employment are high—obviously here is proven aptitude for a profession. Travel experience is helpful, also command of a foreign language, though the latter is found to be seldom called for in the line of immediate duty. The usefulness of stenography is a hotly argued subject which will not be touched on here. The figures show that a third of the women graduates possess this tool.

# TABLE 1

# HOME STATES AND COUNTRIES

New York .				_	10	Oregon			I
California .						Tennessee .			
Massachusetts					4	Virginia			
Ohio					3	Washington			I
Iowa					2	West Virginia			I
Nebraska .					2				_
Texas					2	Total			39
District of Colu	ımb	oia			I				
Idaho					I				
Indiana						Canada			2
Maryland .						Germany .			I
Michigan .						Argentina .			
•						0			
Minnesota .					Ι				_
North Dakota					I	Total			4

Nineteen states and 3 foreign countries are represented. Duplication from year to year produces as class totals: 1937, 8 states and 1 foreign country; 1938, 9 states and 2 foreign countries; 1939, 9 states and 1 foreign country.

#### TABLE 2

#### UNIVERSITIES AND COLLEGES REPRESENTED

Wellesley												5
Barnard .												2
Michigan												
Nebraska												
Radcliffe												2
Stanford .												
Alberta (Ca	nad	a)										1
Bates .												
Berlin (Ger	mar	ıy)										1
Bethany .		•										1
California												
California a	t Lo	os A	nge	eles								1
Cornell .												
Drake .												

Twenty-six women possessed the ability to read a foreign language fluently. Fifteen had stenographic training.

# TABLE 5 EXTRACURRICULAR JOURNALISM IN COLLEGE

Newspapers																			
Daily .																			7
Weekly																			II
Magazine																			9
Press Board																			3
Annual .																			2
Intercollegiat	te								•	٠		٠			٠			. •	1
Total .																			33
							TA	\BI	LE	6									
					PF	EVI	ous	EM	(PL	ΟYM	1EN	T							
Newspaper v		k																	18
Office work								•		٠	•			٠	•	٠	٠	٠	2
																			2
Survey work																٠			I
,				٠										•		٠		•	I
Tutor .																•	٠		I
Stenographe	r	٠	٠		٠	٠					٠	•	٠	٠	•	•	٠		I
Total .																			<b>2</b> 6
							T	ABI	LE	7									
						PF	ŒVI	ous	TR	AVE	L								
Europe .																			16
Latin Ameri	ica																		7
Orient .																			3
Canada .											•		٠			٠	٠	٠	I
Total .																			27
							T	AB	LE	8									
со	LU	мв	IA 1	UNI	VER	SIT	Y AI	MI	SSIC	Ns'	RA	TIN	G A	ΓE	NTR	ANG	Œ		
Very good																			10
Good .																			12
Fair plus																			15
Fair																			3
Special .																			3

# TABLE 9

#### PHI BETA KAPPA

Class									I	V	ımber	
1937											3	
1938												
1939											2	
,,,											_	
То	ta	١.									7	

# TABLE 10

# NUMBER WHO DELAYED GRADUATE WORK

Class	_	lear elay				1	Vu	mber
1937		9						1
		5						1
		I						1
							-	_
Total								3
1938		6						ı
,,,		4						1
		I						3
Total								5
1939		2						1
200		1						3
Total								4
Grand To	tal .							12

# TABLE 11

# AVERAGE AGE AT REGISTRATION

Class								Age
1937 .								21+
1938 .								23
1939 .								22+

School history of the three classes.—Significant points regarding the record of these students while in the School are outlined in Tables 12–14. Their residence record is of especial importance, since experience has shown that it bears

a close connection with the students' efficiency and effectiveness. Financial pressures are a frequent problem. The extent of the School's ability to help women students in need is included in the statement. Further aid was granted to a few through University loans and Federal N.Y.A. assistance. Those who engaged in outside work undertook it almost wholly because of lack of money. The School curriculum entails full-time work. Remunerative employment is justified only when it provides the means for continued School work. The Hitchcock Scholarship and Pulitzer Traveling Scholarships are wholly merit awards to either men or women.

The School rating (Table 14) requires a word of explanation, since no grades are given in the classes. Individual student rating was arrived at in the following manner: winner or alternate for Pulitzer Traveling Scholarships (3 winners, 3 alternates per class), A; close contenders, A—; contenders, B+; graduated with no difficulty in any class, B; others, C.

#### TABLE 12

#### RESIDENCE

Johnson Hall							22
Home, or with near relatives							
International House							5
Room							5
Apartment							3

Four moved at midterm: 3 from Johnson Hall to apartment; 1 from an apartment to International House.

TABLE 13
FINANCIAL ASSISTANCE

Financial Assistance		ber of Sti Assisted		Tot	tal Amoi	ints
	1937	1938	1939	1937	1938	1939
Graduate School of Journalism Scholarships		3	4	\$1,400	\$1,050	\$800
Women's Press Club of New York City Scholarship (1 winner per year)		I	1	175	175	175
National Youth Administration Scholarships			ı	600		135
University loans	I	ı		50	150	

TABLE 13-Continued

Financial Assistance	Nume	ber of St. Assisted		Total Amounts
	1937	1938	1939	1937 1938 1939
Hitchcock Scholarship (1 winner per year)		1		\$1,000
Pulitzer Traveling Scholarships (3 winners per year)		ı	ı	1,500 \$1,500
(3 alternates)	I	1	I	
Outside work	8	ı	5	Amounts of earnings not known

TABLE 14
GRADUATE SCHOOL OF JOURNALISM RATING

Class								Average
1937 .								В
1938 .								В
1939 .								B+

This arbitrary rating has proved useful in appraising much of the foregoing data. Thus it appears that the Phi Beta Kappa honor in itself guarantees no exceptional achievement in the School. Half of the high-ranking women students had only average entrance ratings. Only two out of five A's were members of Phi Beta Kappa. One with this academic honor rated B+; the other four, B. There was a member of Phi Beta Kappa among those who were failed. By this same yardstick is demonstrated the practical advantage of residence in Johnson Hall (student average, B+). The graduate dormitory's nearness and nourishing food leave a mark on the marks. Delayed graduate work shows unevenness in rating and no clear advantage. Those with previous journalistic experience averaged B against a B— for those without it. Perhaps the most interesting fact of all is the progressively stronger ratings of the three successive classes.

Employment records.—The employment records of the forty-three women follow, in Tables 15–20. More important, perhaps, than the type and number of positions held is the fact that only one woman graduate in the group has not worked. Of the forty-two employed, only one, foreign-born, has not yet found an opening in journalism, and has been working thus far as a teacher. Included in the total are twenty-eight positions held steadily and exclusively since graduation; thirty-two positions held consecutively by sometimes two,

sometimes three women; a few held simultaneously (such as a metropolitan newspaper reporter who teaches journalism, corresponds for an out-of-town paper, and is a successful free-lance article writer); and in one case, eight positions held in due course by a roving and persuasive job-getter. The total is expanded in two instances by two newspaper reporters who carried in addition to their regular news assignments the editorial responsibility of a department. These two women appear both under the "Reporting" and "Department editing" subheadings.

# TABLE 15 EMPLOYMENT AFTER GRADUATION

Positions Held	Number
Newspaper	
Reporting	. 9
Department editing and writing	. 5
Column writing	. 2
Washington, D.C., correspondence	. 2
Foreign correspondence	. 5
Total	. 23
Magazine	
Editing	. 13
News research	. 4
Staff writing	. I
Publishing	. 2
Promotion	. І
Total	. 21
Publicity	
University or college	. 5
Public-service organizations	. 3
Hotel	. 2
Research	. 2
Radio	. I
Professional organization	. I
Advertising agency	. I
General	. I
Total	. 16

# TABLE 15—Continued

			_	110			_			-					
Positions Held															Number
Radio															
News writing															I
Script writing															I
Program and p	rod	ucti	on												1
<i>T</i>															_
Total	٠	•	•	٠	٠	٠	٠	٠	٠	٠	•	٠	٠		3
Advertising															
Store															2
Book															I
Total															3
Teaching															
															т
German															2
Total															3
Literary agency															2
Newsreel editing															I
Free lancing, nati	ona	l m	aga	zin	е.										2
Book publishing			_												I
															I
Store clerking .															I
	•	-	-	-	-	-	-	•	-	•	-		-		
Grand tot	al														77

The following table (Table 16) is a breakdown by classes of Table 15. The larger number of newspaper positions held by later classes does not mean expanding opportunities in this greatly sought field so much as a higher percentage of persistence and perhaps of special aptitude. Magazines annually recruit the graduates best fitted for that work. Publicity, an expanding field, has the lure of availability and better pay. It is interesting to see radio rising here on the horizon of journalism.

TABLE 16

EMPLOYMENT BY CLASSES

Position Held		1937	1938	1939
Newspaper				
Reporting		2	2	5
Department editing and writing .		I	2	2
Column writing		I		r
Column writing		I	I	
Foreign correspondence			4	I
	1		_	
Total		5	9	9
Magazine				
Editing		5	4	4
News research		I	I	2
Staff writing				1
Publishing		2		
Promotion		I		
		_		
Total		9	5	7
Publicity				
University or college		4	1	
Public-service organizations		3		
Hotel		2		
Research				2
Radio				I
Professional organization			I	
Advertising agency		I		
General		I		
			-	_
Total		11	2	3
Radio				
News writing			1	
Script writing				I
Program and production			I	
			_	_
Total			2	I

TABLE 16—Continued

		Pos	ition	ı He	·ld						1937	1938	1939
										-			
Advertising													
Store .											I	1	
Book .													I
										- 1	_		_
Total .						٠	•	•	•		I	I	1
Teaching										Í			
Journalism											1		
German												2	
												_	
Total .											I	2	
Literary agend	су										I		I
Newsreel edit	ing											I	
Free lancing,	_										I	I	
Book publishi				_						- 1			1
Public service												ı	_
									•		••	•	
Store clerking	1	•	٠		•	•		•					I
Total e	mp	loy	me	nt							<b>2</b> 9	24	24

It is important to give a picture of the geographic distribution of the employment. In Table 17, the location of the work is recorded. Though the graduates came from nineteen states and three foreign countries, exactly half of the positions they subsequently held have been in New York City. If there had been included in this study a figure for ultimate goals, the magnet which is New York would be proved even stronger.

# TABLE 17

# New York City 38 Washington, D.C. 10 Massachusetts 6 New York State 4 Boston 2 Missouri 38

GEOGRAPHIC DISTRIBUTION OF EMPLOYMENT

#### TABLE 17—Continued

Texas .												
Virginia .												2
California												
Kentucky												I
Minnesota												
Ohio												
												_
Total .												70
Geneva, Sw	itze	rlar	nd									2
London, En												
Paris, Franc	e											I
South Amer	icai	n co	unt	tries								2ª
Argentina												
U												_
Total .												7

a Pulitzer Traveling Scholars, incidentally correspondents for United States newspapers.

How do the women graduates find employment? The way in which these positions were achieved may be described as "self" and "University." The School stresses the desirability of initiative in the matter of careers, and gives encouragement and direction to this end. Requests, however, come to the School for qualified graduates to fill specific vacancies. The University Appointments Office also has calls for women trained in journalism. The close coöperation of the Appointments Office in the placement work is most gratifying. Their full-time and efficient handling of each request makes it impossible to draw a distinction between their office and the School's. Positions other than those directly obtained by the students' own efforts are here listed as obtained through the University.

TABLE 18 SOURCE OF EMPLOYMENT

First Sustair	ned 1	Етр	loyn	ient		1937	1938	1939	Totals
Self									
Newspaper .						3	I	5	9
Magazine .						I	I	2	4
Publicity .						2			2
Advertising .					.	I			I
Public service							I		I
						_	_	_	_
Total						7	3	7	17

TABLE 18—Continued

First Sustai	ned I	Emp	loyn	nent		1937	1938	1939	Totals
University									
Newspaper .					.		3	2	5
Magazine .					.	3	2	4	9
Publicity .					.	3	I	I	5
Advertising .					.			ı	I
Radio					.		I		1
Newsreel .							ı		ı
Literary agent						I		ı	2
Book publishi								ı	ı
Teaching .							1		ı
Ü							_	_	_
Total						7	9	10	26
Other 1	Emp	loym	ent	•		1937	1938	1939	Totals
Self									
Newspaper .					.	2	5	2	9
Magazine .						5	3		9 8
Publicity .						3		2	5
Advertising .					.		I		ī
Radio								I	1
Teaching .						1	ı		2
Ü								_	
Total						II	10	5	<b>2</b> 6
University									
Magazine .					.	1		I	2
Publicity .						3	1		4
Radio							I	• •	I
Clerking.					.			I	ı
3						_			_
Total						4	2	2	8

The weekly salaries earned are tabulated in Table 19. Here the youth of the wage earners must be kept in mind—an average age under twenty-five. The fact that journalism is a profession proverbially badly paid save for the glittering exceptions has bearing on the figures. Membership in the American Newspaper Guild has also been noted in the following table.

TABLE 19 salaries for full-time employment last reported

		Guild		Weekly
Position	Locality	Membership	Class	Salary
Newspaper				
Reporting	Metropolitan .	Yes	. 1937 .	\$50.00
1 8	City of 32,000	No	. 1937 .	25.00
	City of 300,000	No	. 1938 .	20.00
		Yes		
		No		
		Yes		
		No		
Departmental editing.		No		
2 op 8		No		
Foreign corre-	, 33,		757	7
	South America	Yes	1028	Space rates
spondence	South America	No	1020	Space rates
	South Milerica	140	. 1939 .	. opace rates
Magazine				
-	Metropolitan .	No	. 1937 .	\$27.50
8		No		
		No		
Staff writing		No		
News research		No		
	Metropolitan .	Yes	. 1938 .	40.00
	Metropolitan .	No	. 1939 .	33.33
		No		
Radio	1		,,,,	J
	Motuomalitam	No	0	2= 22
News writing				
Executive	City of 400,000	№	. 1930 .	30.00
Advertising		No		
	Metropolitan .	No	. 1939 .	30.00
D. 1.12. 1.	3.6 . 19.	3.7		
Publicity		No		
	Metropolitan .	No	. 1937 .	34.00
	Metropolitan .	No	. 1937 .	25.00

# TABLE 19-Continued

Position	Locality		Λ	1ei	Guil mbers				Class				Veekly Salary
Publicity (continued)	Metropolitan .				No				1937			. 4	\$22.25
	Metropolitan .				No				1938				50.00
	Metropolitan .				No				1938				25.00
	Metropolitan .				No				1939				25.00
	Metropolitan .				No		•	•	1939				22.25
Literary agency	Metropolitan .				No				1937				25.00
	Metropolitan .	•	٠		No		•		1939	•	٠	٠	25.00
Teaching	Woman's colleg	ge			No				1938				34.60

The final table, by averaging the pay for positions last reported, indicates the ratio of improvement in salaries as time marches on. It is several years too soon to say what this small beginning of a curve will lead to. The main consideration in any case is the zest of the profession—often regardless of monetary return.

TABLE 20
AVERAGE WEEKLY SALARIES BY CLASSES

Class								Salary
1937 .								\$34.83
1938 .								30.96
1939 .								25.02

At the time of the survey, three of these women graduates were married. Two continued their work; one states that it is her intention to do so.

In concluding this limited study it may be said that though figures give helpful data, it is the individual graduate and not percentages that matters.

On the whole, our admissions procedure has brought the School dependable material. Its educational program broadens both their general and specialized knowledge. Those who complete the course, almost without exception, participate in some aspect of journalism. Each new student brings new qualities to the field—a highly competitive and strenuous one. These women graduates are assets to the School. In their diversified employment they have contributed to a complex profession. They have been admitted to the School in numbers which can be readily absorbed.

The women's seminar in the Spring Session, instituted three years ago, has made it possible to know the students well, to recognize their qualities, and

to shape their direction. By supervised experience in interviewing, by analysis and research in the fields of special interests, by group projects and group dis-

cussions, the edge of their ambition is sharpened.

Especial thanks are due to Mrs. Eva vB. Hansl, newspaper woman and editor, for her large part in the work with last year's class. To Mrs. Betsy Talbot Blackwell, editor of *Mademoiselle*, we extend our gratitude for her welcoming the women students in a behind-the-scenes editorial project in the spring of 1939, and her entrusting the guest-editorship of the College number of her publication (August, 1939) to one of our students.

For assistance in research, handling of questionnaires, and the tabulations on which this survey is based, I wish to thank the National Youth Administration which assigned Miss Dorothy Boyer, Journalism '40, to the work it entailed.

3

Under the direction of Professor Elmo Roper of the Faculty of Journalism we made a survey of student opinion in fifteen universities for the purpose of learning from what sources students prefer to obtain financial aid. As the number of our students in need of some financial support is increasing each year, we invited Professor Roper to make a scientific inquiry so that our plans to advise and to assist them in the future could be related to student preference and expectation in so far as that is possible within the University's resources and in harmony with University policy.

By means of a questionnaire and personal interview, based on the technique which Professor Roper originated and has used with conspicuous success in making surveys of public opinion for *Fortune* magazine, we obtained information which will be of value to the Graduate School of Journalism. As this is a pioneer project in the sense that it applied tested statistical research methods to an educational problem, I thought you would find the results of Professor Roper's survey of interest and of possible service to the University.

Professor Roper and his staff interviewed a representative cross section of the economic groups among freshmen, sophomores, juniors, and seniors in the following universities:

EAST: Harvard, Brown, Syracuse, and Columbia.

souтн: Tulane, Alabama, and Vanderbilt.

MIDDLE WEST: Minnesota, Northwestern, Iowa, Oklahoma, Michigan, and Ohio State.

west: California and Washington.

Two questions relating to the financing of a university education were included in the questionnaire, which also related to career trends. A special report on career interests will be submitted later. I make mention of this factor because our inquiry was designed to elicit student opinion in relation to the realities of their present experience and their future careers, in order to avoid purely academic answers based upon theoretical consideration.

The first question relating to student finances was as follows:

"Which of these do you think is the best way for capable but needy students now in colleges or universities to get financial assistance?"

Professor Roper's report is presented in Table 21 on page 200.

An analysis of this table indicates student opinion on the subject to be as follows: The largest group, 42.5 percent, prefers part-time employment. The second major group, 32.3 percent, favors scholarships. Only 14.5 percent consider university or private loans desirable. The smallest group, 7.4 percent, would be receptive to Federal or state aid. There is only a slight variation of opinion between the freshman and senior years, indicating that the experience of students within the universities does not cause many of them to change their attitude toward the best method of financing their education.

Geographically, there is a variation in student opinion. In the Middle West 16.8 percent of the respondents favor loans; in the East the percentage is 10.1. In the Middle West and the West the sentiment in favor of part-time work is 46 and 50.9 respectively, compared with 36.4 in the East and 37.9 in the South.

There is also a difference of opinion between students in the West and in the Middle West and students in the East and South toward government aid, the percentage being as follows: East, 4.9; South, 6.4; Middle West, 7.6; and West, 13.

The second question relating to the same subject, but designed as a check on the previous question, was as follows:

"Are there any of these from which you think students should not receive financial assistance?"

Professor Roper's tabulation of the replies (Table 22) is on page 201.

TABLE 21

ANSWERS TO THE QUESTION: WHICH OF THESE DO YOU THINK IS THE BEST WAY FOR CAPABLE BUT NEEDY STUDENTS NOW IN COLLEGES OR UNIVERSITIES TO GET FINANCIAL ASSISTANCE  $\mbox{\rotation}$ 

	Sc	Sex			Year in School	School			Geograph	Geographic Division	
	Male	Male Female	Total	Fresh- man	Fresh- Sopho- man more	Junior	Senior	East	South	Middle West	West
Number answering	804	703	1,507	373	376	380	378	400	299	109	207
Number of answers	865	753	1,618	414	390	418	396	428	327	655	208
	Percent	Percent	Percent	Percent	Percent Percent Percent Percent Percent Percent Percent Percent	Percent	Percent	Percent	Percent	Percent	Percent
Private and/or university part-time employment	43.2	41.6	42.4	42.3	43.9	41.6	41.6 42.1	36.4	37.9	46.0	50.9
Privately endowed and/or university scholarships	31.4	33.2	32.3	30.4	33.3	35.0	30.3	45.3	36.4	26.6	16.8
Private and/or university loans	15.3	13.7	14.5	15.2	13.3	13.4	16.2	10.1	15.0	16.8	15.9
U. S. and/or state government aid	7:4	7.3	7:4	8.2	6.9	6.2	8.1	4.9	6.4	9.2	13.0
Don't know	2.7	4.2	3.4	3.9	2.6	3.8	3.3	3.3	4.3	3.0	3.4

Percentages are based on the total number of ways considered best, and add to 100.

TABLE 22

ANSWERS TO THE QUESTION: ARE THERE ANY OF THESE FROM WHICH YOU THINK STUDENTS SHOULD NOT RECEIVE FINANCIAL ASSISTANCE?

	S	Sex			Year in School	School			Geographi	Geographic Division	
	Male	Female	Total	Fresh- man	Fresh- Sopho- man more	Junior	Senior	East	South	Middle West	West
Number answering	725	639	1,364	344	338	334	348	385	242	530	207
Number of answers	750	652	1,402	357	343	344	358	391	258	542	211
	Percent	Percent	Percent	Percent	Percent Percent	Percent Percent	Percent	Percent	Percent	Percent Percent Percent	Percent
Private and/or university loans	26.0	28.8	27.3	28.3	27.7	27.9	25.4	28.6	29.9	25.3	27.0
U. S. and/or state government aid	28.3	19.5	24.2	20.2	21.3	28.2	27.1	26.6	27.1	23.6	17.5
Private and/or university part-time employment	5.1	5.8	5:4	6.7	6.1	4.4	4.5	3.1	8.1	6.7	3.3
Privately endowed and/or university scholarships	1.2	∞.	0.1	∞.	1.4	ġ.	∞.	iċ	2.7	7.	ιĊ
None	16.5	20.6	18.4	9.61	21.9	14.8	17.3	21.5	20.2	22.5	
Don't know	22.9	24.5	23.7	24.4	21.6	23.8	24.9	19.7	12.0	21.2	51.7

Percentages are based on the total number of ways considered least desirable, and add to 100.

Expressed in terms of opposition to the several methods of financing an education as indicated in the questionnaire the larger group had no opinion to express or was opposed to any form of financial assistance. However, among those expressing their views there was practically no opposition to scholarships, and only 5.4 percent opposed part-time work. It is significant that 24.2 percent opposed government aid and 27.3 percent did not favor loans.

Here, again, there is an interesting divergence of opinion in different parts of the country. The East and South are more opposed to government aid than the Middle West and West, the percentages being: East, 26.6; South, 27.1; Middle West, 23.6; and West, 17.5.

In general, I think we may draw the following conclusions from Professor Roper's survey:

As capable and needy students prefer part-time work to loans or scholarships, it may be desirable and necessary, in order to attract this type of student, for educational institutions to adjust their curricula and assist students to obtain part-time employment.

Professor Roper's survey appears, however, to have a larger educational significance than that of the immediate application of the findings to current policies. The real significance, I think, of present student opinion toward the financing of education is the opposition to government aid. Students do not favor a spending-lending policy to help them make their way in the world. Only 7.4 percent of the students interviewed considered aid by the Federal or state governments as desirable. This, I think, may be interpreted as a vote of confidence in the continuation of the student-aid policies of educational institutions such as Columbia University.

Those who have been charging that some of the leading universities in the United States have become centers of socialistic and communistic theories of government and economics should study these statistics. University students today are not applying the prevailing debt-theory of political economy in their own lives, nor are they looking forward to the government to provide them with jobs. Professor Roper's survey of student interest in careers, which will be reported subsequently, points further in the direction of student independence of government. Only 18.4 percent of the men interviewed stated that they thought careers in government service offer the best opportunities, and but 9.1 percent of

the women interviewed considered that government work offered them the greatest opportunity. The overwhelming majority of university men and women are looking forward to careers outside of Federal, state, and local governments, in industry and in the professions. More than 80 percent of the students interviewed in the fifteen universities listed above, expect to make their living and devote their lives to careers which are independent of these governmental divisions. Educators throughout the nation may have sound reason for confidence in the sensibleness of present-day university students. All of the international and national political and economic jargon which they have heard outside the classroom, and perhaps in a few classrooms, has not caused them to lose faith in opportunities for careers in existing American enterprises and professions, nor have they been attracted by the bonanza of government debt or private borrowing as an educational aid. Students prefer to work for their education and, what is perhaps more important, they are preparing to work for a living outside of governmental jobs, after they are graduated.

Since this School was opened in 1912, it has been the custom to invite men and women actively engaged in the profession or in public affairs to lecture, to participate in discussions, or to serve as leaders in seminars. During the present academic year these visitors brought to the classroom or to special groups of alumni and students a wide range of interests and experiences which enriched our educational program. The interest and co-öperation of our guests also provided students with many productive personal contacts. The names are listed to record the gratitude and appreciation of the Dean, Faculty, and students.

September Otto D. Tolischus, '16, Berlin correspondent, The New York Times

October Dixie Willson, feature writer; author of Favorite Stories of Famous Children

Emma Bugbee, reporter, New York Herald Tribune; author of Peggy Covers the News

Paul W. White, '23, director of the Department of Public Affairs, Columbia Broadcasting System

Edward R. Murrow, European chief of staff, Columbia Broadcasting System

October Marion Bussang, '35, reporter, New York Post

Arthur Monroe, '37, Latin-American Department, United Press

Associations

November Joseph Wechsberg, special correspondent of Czechoslovakian

dailies and lecturer

Carl Randau, New York World-Telegram; president, New York

Newspaper Guild

Mabel Greene, reporter, The (New York) Sun

December Vera Connolly, special article writer; member of the editorial staff of Woman's Day

William C. Chanler, corporation counsel, City of New York Mark Sullivan, Washington commentator, New York Herald Tribune; author of Education of an American

Mrs. Eva. vB. Hansl, editorial director of the radio programs, "Women in the Making of America"

Hon. Spruille Braden, United States Ambassador to Colombia John F. Magor, '37, public opinion editor, *Calvacade News* Weekly, London

Dario de Almeida Magalhaes, of Rio de Janeiro, Brazil, managing director, *Diarios Asociados* 

Fred Kreutzenstein, New York correspondent, Diarios Asociados

January Louis Fox Connell, Hollywood, California, editor, You magazine

Betsy Talbot Blackwell, editor, Mademoiselle magazine

Patricia Lochridge, '38, Public Affairs Department, Columbia Broadcasting System

William W. Cook, '38, The New York Times

Sir Arthur Willert

Konrad Wrzos, Polish author

Hubert S. Liang

Hon. Kensuke Horinouchi, Japanese Ambassador

February Charles Merz, editor, The New York Times

Ted Husing, Columbia Broadcasting System sports commentator

March

Symposium: George E. Sokolsky, '17; A. D. Rothman, '17, Australian Associated Press; Merryle S. Rukeyser, '17, Hearst newspapers; Elliott Sanger, '17, vice-president and general manager of radio station WQXR; Miss Phyllis Perlman, '17, press representative; Professor Walter B. Pitkin, Graduate School of Journalism

Eric Boder, Irish Broadcasting Company

Stanley Morison, the London Times; editor, The History of the Times

Lester Markel, Sunday editor, The New York Times, host to the women's seminar

Robert Jeans, caption writer, New York Daily News

Michael Horten, '34

Mathew Gordon, '32

Oscar Graubner, photographic laboratory, Life and Time magazines

Daniel Longwell, executive editor, Life magazine

April

Webster Artz, radio director of United Press Associations James Clark, assistant to Professor Lyman Bryson, editor, *Peo-ple's Library* in Adult Education Association, Teachers College Amy Comstock, associate editor, *The Tulsa* (Oklahoma) *Tribune* 

Helen Sioussat, assistant director of Talks, Columbia Broadcasting System

Geraldine Mavor, '37, assistant to Maxim Lieber, literary agent Bob Trout, Columbia Broadcasting System

May

Keith Henney, editor of electronics and phototechnique; author of Color Photography for the Amateur

If we may measure the progress of the School by the interest of the students in our courses of study, by their classroom records, and by their personal and professional development, the academic year 1938–39 has been satisfactory.

Respectfully submitted,

Carl W. Ackerman,

Dean

June 30, 1939

# BARNARD COLLEGE

# REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

I have the honor to submit the following report on the condition and progress of Barnard College during the academic year 1938–39.

The enrollment in our four regular classes has been as follows:

				1937-38	1938-39
Seniors				200	178
Juniors				196	179
Sophomores				188	193
Freshmen .				234	236
Total .				818	786

In addition to these regular students, we have had 137 unclassified students and thirty-one special students, making a total of 954 primarily registered in Barnard College, a decrease of thirty-two as compared with last year.

Besides the students primarily registered in Barnard, we have had twenty-six students from Teachers College and 119 from other parts of the University taking some courses with us. The total registration has thus been 1,099, a number twenty-three less than a year ago.

As the total number of admissions was somewhat larger than in the preceding year, the decrease was due partly to the graduation of an exceptionally large senior class at the preceding Commencement and partly to the dropping out of a considerable number of former students because of business conditions.

On Commencement Day, 1939, 216 candidates were recommended by Barnard College for the degree of Bachelor of Arts, as compared with 245 in 1938.

The Board of Trustees suffered a sad loss in the death on September 2,

1938, of Mr. James R. Sheffield, who had been a member for over twenty years and Chairman of the Board from 1930 to 1937, when he regretfully retired because of ill health. He knew the College well and guided its policies with wisdom and breadth of outlook. He believed so profoundly in the worth of Barnard that from his own association with it he derived real personal pleasure and pride, while his confidence in its merits strengthened and cheered the other officers of the College. His charm, his courtesy, his gentleness, and his sense of justice shed on the meetings of the Board an atmosphere most favorable to enlightened decisions and won the affection of all who were associated with him.

There have been several important changes in the Faculty. After serving for thirty-six years in the Department of Botany, to which his scholarly work brought much distinction, Professor Tracy E. Hazen retired at the end of the academic year, carrying with him the regard and the warm good wishes of his colleagues. Professor Hoxie N. Fairchild, an exceptionally able and valued member of our Department of English since 1927, was transferred from Barnard to the Graduate School. Professor Harry D. Gideonse, our brilliant and stimulating new Chairman of the Department of Economics and Social Science, after only one year with us, resigned to assume the presidency of Brooklyn College.

The most noticeable change in our Faculty, however, is the retirement of Miss Mabel Foote Weeks, who has been for thirty-two years the friend of us all. Besides teaching in the Department of English, she created the position of Mistress of Brooks Hall, and later that of Assistant to the Dean in Charge of Social Affairs. The beloved adviser of many generations of students, she guided our organizations and our social life in the spirit of scholarship, human kindliness, and enlightenment. She made her post an important link between the Faculty and the undergraduate body and helped interpret the one to the other. She showed a rare gift in drawing out the best in all of us and making "social affairs" in the wider sense a really significant part of education. She carries with her our warmest good wishes for many interesting years of life and good health.

To succeed Miss Weeks, the College has appointed one of its own graduates, Christina Phelps, of the Class of '25 (Mrs. Alan Fraser Grant), Ph.D., Columbia, 1930, who has added to a brilliant scholarly record

much experience in the world. Besides directing the Office of Social Affairs, she will give a course in the history of the Near East, a timely subject in which she is a specialist.

The year has been an extremely busy one. On the more purely educational side, both Faculty and students have been exceptionally active and interested, and a number of promising new plans have been adopted or are under consideration. Perhaps the most interesting are the new interdepartmental courses. The barriers between departments have sometimes been obstacles to the pursuit of knowledge. In the past we have done a few things to break them down, but nothing as drastic as "Medieval Studies" and "American Studies." Besides drawing a number of departments together these courses introduce a new type of instruction, doing away with regular classroom lectures or recitations and substituting individual work with a tutorial adviser, reading, occasional seminars with professors, and, when possible, research which makes use of the rich resources of the University and the city.

These two courses are intended for a small number of exceptionally able seniors. Each one will occupy approximately three-fifths of the student's time, permitting her to take also two courses of the old type.

"Medieval Studies" was announced first, as a joint offering of the Departments of English, Fine Arts, French, History, Italian, and Philosophy, under the chairmanship for 1939–40 of Professor Ethel Sturtevant. The medieval period seemed a particularly suitable one for a course of this type. The Middle Ages were a period of cultural unity, due to the absence of clearly defined national boundaries, the feudal organization of society, which cut across such boundaries as were determined, the use of Latin and French as mediums of communication among medieval people, and the widespread unity of the Christian Church at that time. The period thus illustrates the possibility of interrelating and combining into one culture manifold traditions inherited from the past. The study of it should be particularly valuable in the world of today, so split into rival nations and cultures and so deeply in need of some high type of cultural unity.

deeply in need of some high type of cultural unity.

"American Studies" is equally timely and of even wider appeal today. "An integrated study of the economic, literary, governmental and historical aspects of American life," it is presented by members of

the Departments of Economics, English, Government, and History, under the chairmanship for 1939-40 of Professor Elizabeth Reynard, and with Miss Elspeth Davies, Barnard, '38, Radcliffe, A.M., '39, as special Tutorial Adviser. The work of each student will be adapted to her special interests and needs.

The plan for "American Studies" has already attracted considerable attention. It seems especially timely at the present moment, when we certainly ought to try to formulate very carefully and understand deeply the nature of that Americanism or American way of life which we are saying we wish to defend and preserve.

Other interdepartmental relations have also been developed. A plan for a course in the physical sciences, covering astronomy, geology, and physics has been tentatively approved but not yet put into effect. An interdepartmental major in economics and government has been ratified. The comparative literature courses arranged by the Department of English, drawing together the different national literatures, exemplified this year by Professor Bigongiari's comparative medieval literature, are to be continued next year by the offering of a course in modern French poets and their relation to English and American literature by Professor Mespoulet of the Department of French, recommended for English majors.

There has also been a good deal of discussion of our foreign language requirement and the general question of the study of foreign languages and literatures. The requirement that each candidate for the degree must be able to read at sight with ease one foreign language has been so efficiently administered of recent years by the Faculty Committee on the Foreign Language Requirement that scarcely any students remain for long deficient. We begin to fear, however, that we are paying too high a price for this requirement, since many students seem to feel, oddly enough, that once they have passed the test they should promptly drop foreign language study—and this at a time when knowledge of languages and literatures is more important than ever before in the history of the world. This whole question will be taken up next autumn. After considerable study the Committee on Honors has recom-

After considerable study the Committee on Honors has recommended, and the Faculty has approved, the abolition of the degree "with honorable mention" and the return to the older plan of degrees

with varying "laudes"—cum laude, magna cum laude, and summa cum laude. This was put into effect at Commencement.

An important educational accomplishment of the year was the study made by Miss Mary F. McBride of the needs of the freshmen for advice and the possibilities of meeting them. Working under the Associate Dean and centering her advice at first on the freshmen's programs, Miss McBride explored the resources of the various administrative offices and certain special departments such as Psychology, and experimented with the coördination of all these to help freshmen adjust themselves to college life and work and get the utmost possible benefit from the rich opportunities for development that Barnard offers.

With unusual administrative ability and a gift for making friendly contacts with young people, Miss McBride was able to find out for us much that was new to us about helping freshmen. Her excellent report convinced the Committee on Instruction, Student Council, and the generous donor who had made possible the investigation, that we ought to continue along the lines she had explored.

It seemed best to have the more permanent Freshman Adviser a member of the teaching staff, functioning from within the Faculty. We have been fortunate in securing for the position next year Miss Lorna F. McGuire, Ph.D., Radcliffe, who has been Instructor in English at Barnard for the past four years. A gifted teacher, she will continue to conduct a section of freshman English, and she will have the benefit, in her academic advising, of the guidance of the Faculty Committee on Students' Programs under the chairmanship of the Associate Dean. We are very grateful to the donor who has made all this possible and to Miss McBride for exploring the way.

Barnard has always been deeply interested in the education of teachers, a profession to which it has contributed many distinguished members. It has also been much worried, of recent years, by the strange new requirements for licenses to teach which often seem designed to discourage educated persons from entering this field of work. Obviously Columbia and Barnard Colleges, affiliated as they are with a great professional school, Teachers College, ought to be leaders in the improvement of this situation. We are therefore gratified by an opportunity to participate in an important new experiment. A year ago the

American Council on Education in Washington established a Commission on Teacher Education with funds from the General Education Board of the Rockefeller Foundation. In June of this year the Commission selected twenty universities and colleges and fourteen public school systems for a nation-wide demonstration of teacher education on a substantial modern basis.

Barnard College, Columbia College, and Teachers College have been selected as one of the university units. On the basis of plans under discussion for several years, they propose to carry forward a three-year program, beginning in the junior year with pre-seminars and closely coördinated professional courses, and leading to graduate divisional seminars in the fields of the humanities, arts, social sciences, natural sciences, home and community, and the materials of elementary education, where the more specialized aspects of liberal arts instruction and professional education will be systematically related to the broad aspects of general education.

Very busy on the purely educational side, the year has shown a perfect whirlwind of activity on the more social side, or what we may call public relations. Much of this has been part of our plans for the celebration of our Fiftieth Anniversary and the related efforts to make the College better known to the nation at large.

We want this celebration of ours to commemorate adequately and pleasurably the founding and growth of this college for women and the development of that marked individuality which it possesses today. But we do not want the ceremony to have a purely feminist note; we wish rather to emphasize the fact that this half century at Barnard has been a period of happy collaboration between human beings of both sexes working together as scholars, teachers, and students within the hospitable and enlightened organization of Columbia University.

The Faculty Committee on the Convocation, under the chairmanship of Professor William T. Brewster, and the Trustee-Alumnae Committee on the Dinner, under the chairmanship of Mrs. Alice Duer Miller, have made some interesting plans. Because of conflict with other public events, it has been found necessary to postpone the celebration from October to November 14 for the Dinner and November 15 for the Convocation. As part of the commemoration a history of Barnard College has been written by Alice Duer Miller and Susan Myers, with the help of other graduates of Barnard under a committee headed by Miss Mabel Parsons, Alumnae Trustee. This very interesting book will be published shortly by Columbia University Press.

Another vivid presentation of Barnard to the public is the colored film of the College prepared under the direction of Miss Helen Erskine and first shown last autumn. This is a really notable achievement, showing with dignity and beauty the academic, the social, and the aesthetic sides of Barnard in its wonderful setting of New York, the Hudson, and the Westchester hills.

Still another presentation of the College connected with the celebration was "National Barnard Day" on November 19, when an excellent program was broadcast over the coast-to-coast network of the National Broadcasting Company to more than seventy-five groups of alumnae and friends, in forty-one states, listening in throughout the country. The subject was "Sending Girls to College—Why and How," and the speakers were an author, Alice Duer Miller; a business executive, Helen Rogers Reid; an astronomer, Henrietta Swope; a policewoman, Rhoda Milliken; and an actress, Jane Wyatt: all Barnard graduates who told from their own experience why they thought girls should go to college. Dean Gildersleeve presided.

The plan was devised and carried out by an alumnae committee with Mrs. John Miles Thompson, (Adele Alfke, 1919) as chairman, aided by Miss Helen Erskine and Miss Helen Kennedy Stevens, of the college staff.

There was also great activity by various committees concerned with money raising, which planned social events as well as direct appeals. Space does not here permit adequate thanks to all the many daughters and friends of Barnard who helped; but at least the chairman of three of the most important groups must be gratefully named: the Honorable Dave Hennen Morris of the Men's Committee, Mrs. Hooker Talcott of the General Committee, and Mrs. Bernard Heineman of the Alumnae Fund.

The zealous Associate Alumnae also undertook the immense labor of an Opera Benefit. This performance of Thais on February 24 netted

\$1,457 for our scholarship fund and brought the College before New York in a very pleasing way.

A committee of the Friends of Barnard, with Miss Belle da Costa Greene and Mrs. Alfred F. Hess as the leading spirits, arranged with the Durand-Ruel Galleries a quite extraordinary and delightful Renoir Exhibit held in the spring which netted the unexpectedly large sum of \$3,900 for our Fine Arts Department, to be used for scholarships for study in this country or abroad.

In connection with these public functions we should perhaps list a testimonial luncheon generously given by the Pan American Society to Dean Gildersleeve on March 24 in recognition of the distinguished service to Pan American relations rendered by the Spanish Department of Barnard College. Barnard students from Latin America, the Consuls General of various Latin-American countries, and others interested in this important field of international work were present at India House, under the genial chairmanship of Mr. John L. Merrill, president of the Pan American Society. Professor Carolina Marcial-Dorado, the head of our Department of Spanish, was there to receive this tribute to the work in which she has played so vital a part.

The New York World's Fair also added to the activities of the year. As large numbers of visitors were expected in the city, and it was felt that some of them might wish to visit Barnard, a committee was set up under the chairmanship of Professor W. A. Braun to make plans for receiving, guiding, and informing any who called at the Barnard campus. A large number of circulars has been printed for distribution. We have planned to keep the Residence Halls partially open between sessions for the accommodation of Barnard graduates or any visitors from the educational world who may wish to occupy rooms while attending the Fair.

The busy and varied pageant of the year was fittingly concluded by the beautiful and dignified ceremony on June 10, when King George and Queen Elizabeth visited our university.

The financial situation of the College, like that of the other corporations making up Columbia University, remains very perplexing. Because of a continued falling off of income, there was a deficit on operating expenses during the year of \$68,143. We had feared a far larger one.

The gifts paid in and pledged during the year amounted to \$205,273. Of these, the most outstanding was the very generous donation of \$100,000 from Mr. Edward S. Harkness to the Endowment Fund for Scholarship Aid. At a time when so many excellent students are in bitter need of help, this was particularly welcome.

Another large item was \$32,882 to establish the Kimball Fellowship Fund, to provide a fellowship for a woman from Spain or a Spanish-American country, another pleasing evidence of the general recognition of Barnard's interest in this field.

A notable gift came from the Anne Brown Alumnae Association, of securities of a value of approximately \$25,000, to establish the Anne Brown Endowment Scholarship Fund. We are happy to have further aid for needy and excellent students thus provided under the name of a woman so distinguished during past years in the field of private school education.

The Honorable Dave Hennen Morris of our Board of Trustees generously donated securities of a value of over \$10,500 to establish the Noel Morris Memorial Fund.

The College received word of the bequest of \$10,000 from a distinguished friend, Alma Gluck Zimbalist, to establish the Alma Gluck Zimbalist Scholarship, to be awarded annually to a student who wishes to major in political economics. This has not yet been paid in.

Special mention should also be made of a welcome gift of \$2,500 from Mr. William Nelson Cromwell, and a very timely donation of \$2,000 from the Carnegie Corporation, for current expenditure on scholarships. We are indebted also for generous aid to Mrs. George Blumenthal, Mr. Jules Bache, Mrs. Elon Huntington Hooker, Major Edward Bowes, Mr. J. Frederick Talcott, Mrs. Otto Kahn, several members of our Faculty, and many others whose names cannot be enumerated.

The Alumnae Fund gifts, under the stimulus of the approach of the Fiftieth Anniversary and through the work of a devoted committee, with Mrs. Bernard Heineman as chairman and Mrs. William Prescott White as secretary, attained the unusual total of \$35,196.

As part of this, some outstanding anniversary gifts from reunion classes were: the fortieth anniversary class, 1899, \$5,445; the thirtieth, 1909, \$3,509; the twenty-fifth, 1914, \$5,584; and the tenth, 1929, \$9,117.

Among the individual donations special note should be made of the addition of \$2,000 to the principal of the Adam Leroy Jones Memorial Library Fund made by Mrs. Jones (Lily Murray, '05); \$5,000 in cash and a pledge of \$15,000 in addition from another alumna, who wishes to remain anonymous; a gift of \$1,000 "in memory of the Class of 1893" by another alumna who wishes to remain anonymous; the tenth anniversary gift of the Class of 1927, devoted to refurnishing very attractively the Dean's office.

Amid the general uncertainties of national and international affairs, it has been a hard year for money raising, but our Fiftieth Anniversary Fund, including gifts and pledges, now totals \$948,701, and we hope to push it well over the million mark before the celebration in the autumn.

Many friends of the College have helped it in the very varied activities of this busy year. To them all, Trustees, members of the Faculty and other officers, alumnae, undergraduates, and those many warm friends who have no direct relation to the institution, Barnard is very grateful. With their aid it hopes to keep the flame of liberal education burning brightly through these clouded and perplexing days in which we live.

Respectfully submitted,

Virginia C. Gildersleeve,

Dean

June 30, 1939

## TEACHERS COLLEGE

#### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

SIR:

This report which I have the honor of submitting herewith contains the record of developments within Teachers College during the past academic year and suggestions and recommendations for the future. I wish to call your particular attention to certain points of progress, notably the improvements in the practices of the Advanced School of Education and the sharpening of the requirements for the degrees of Doctor of Philosophy and Doctor of Education; the improvements in the guidance of students introduced by the Secretary and the Committee on Professional Advisement; the experiment with quick learners carried on by Professor Hollingworth in the Speyer School; the trend toward unity in the field of curriculum and teaching; the continued development of the Faculty Advisory Committee; and the substantial progress toward a balanced budget and improved service in the dining halls and dormitories. It has been a year of activity and good will.

The resignation of Dr. James E. Russell, Dean Emeritus of Teachers College, as a member of the Board of Trustees, was very reluctantly accepted at the meeting on February 16, 1939. He was appointed Trustee Emeritus as of that date.

It is with sadness that I report the death of Mr. DeForest Stull, Associate in Teaching of Social Science, on December 10, 1938; of Mr. Harold W. Wright, Instructor in the Education of the Handicapped, on May 10, 1939; and of Mr. Arthur Ware, Lecturer in Household Arts and Science, on February 19, 1939.

I am happy to record the following appointments: Edwin A. Lee, Ph.D., as Professor of Education, from July 1, 1938; Arthur Lismer, A.R.C.A., as Visiting Professor of Fine Arts, from September 1, 1938, to June 30, 1939; Earl C. McCracken, Ph.D., as Assistant Professor of Household Administration, from July 1, 1938. Otto P. Schinnerer, Ph.D.,

Assistant Professor of German in Columbia College, and Frank Callcott, Ph.D., Assistant Professor of Spanish in Columbia University, were appointed to seats in the Faculty of Teachers College, effective September 1, 1939. Irving Lorge, Ph.D., Associate Professor of Education, was appointed Executive Officer of the Institute of Educational Research, Division of Psychology, effective July 1, 1939.

The title of Ethel M. Feagley, A.M., Library Consultant of Teachers College, was changed to Associate Librarian, effective April 1, 1939.

It is a pleasure to announce the following promotions, effective July 1, 1939: William L. Hughes, Ph.D., from Associate Professor to Professor of Physical Education; Ralph B. Spence, Ph.D., from Associate Professor to Professor of Education; Mary E. Townsend, Ph.D., from Associate Professor to Professor of History; James L. Mursell, Ph.D., from Associate Professor to Professor of Education; George T. Renner, Ph.D., from Associate Professor to Professor of Geography; William B. Featherstone, Ph.D., from Associate Professor to Professor of Education; Magdalene E. Kramer, Ph.D., from Assistant Professor to Associate Professor of Speech; Walter E. Hager, Ph.D., Associate Director of Student Personnel and Secretary of Teachers College, as Assistant Professor of Education.

The following appointments to the rank of Professor Emeritus were approved by the Trustees: Professor William C. Bagley, Ph.D., Ed.D., as Professor Emeritus of Education, from and after July 1, 1940, with leave of absence during the academic year 1939-40; Professor Peter W. Dykema, M.L., as Professor Emeritus of Music Education, from and after July 1, 1940, with leave of absence during the academic year 1939-40; Professor Jean Broadhurst, Ph.D., as Professor Emeritus of Bacteriology, from and after February 1, 1940, with leave of absence during the Winter Session of 1939-40. It is a source of much regret to me that the time has come for the retirement from active service of these three members of the Faculty whose brilliant work in the College and for education is so widely recognized. Some of the well-earned leisure which they should enjoy, now that they are freed from the burden of their responsibilities here, has already been committed by them to further activities for the cause to which they are devoted. Other retirements from active service include: Miss Grace V. Bliss, Instructor and Curator in Fine Arts and Fine Arts Education, effective June 30, 1940, with a leave of absence during 1939–40; Miss Alexina G. Booth, A.M., Assistant and Secretary in Curriculum and Teaching, effective June 30, 1939; Miss Jessie F. Brainard, Librarian of the Horace Mann School for Boys, effective June 30, 1940, with a leave of absence during 1939–40; Miss Helen Crissey, Secretary of Horace Mann School, effective June 30, 1939; Miss Grace Knight, Assistant in Whittier Hall, effective June 30, 1939; and Mrs. Janet Rowland McCastline, A.M., Assistant to Physician, Horace Mann School, effective June 30, 1939. I wish to record here the deep gratitude of the College which has benefited much from their long service in its interest.

I regret to report the following resignations, effective July 1, 1939: Lois Hayden Meek, Ph.D., Professor of Education; Agnes Snyder, Ph.D., Assistant Professor of Education; Paul M. Limbert, Ph.D., Assistant Professor of Education; Edwin J. Stringham, D.Pd., Assistant Professor of Music Education; and, effective March 31, 1939, M. Rebecca Lingenfelter, A.M., Associate Librarian.

It is also a source of much regret to record that Edward L. Thorndike, Ph.D., LL.D., Sc.D., resigned his directorship of the Institute of Educational Research, Division of Psychology, as of June 30, 1939.

The following leaves of absence were granted: to Professor Edwin J. Stringham and Dr. Ella Woodyard for the academic year 1938–39; to Professors Thomas Alexander and Goodwin Watson for the Winter Session of 1938–39; to Professors Karl W. Bigelow (honorary) and Belle Northrup for the academic year 1939–40; to Professors Mabel Carney and Edward H. Reisner for the Winter Session of 1939–40; and to Professors Belle Boas, William L. Hughes, S. Ralph Powers, R. Bruce Raup, Maxie N. Woodring, and Goodwin Watson for the Spring Session of 1939–40.

I wish particularly to record the thanks of the College to Professor Morton Arendt, of the School of Engineering of Columbia University, for his excellent services in connection with the installation of the new generator, and to Professor Hugh Findlay, of the School of Architecture of Columbia University, for his very attractive decoration of Russell Court.

Teachers College gratefully acknowledges the following gifts, grants, and bequests which were made during the current year: from the Carnegie Corporation, \$19,900 for the study of human nature and changes in the social order, \$10,000 for the study of metropolitan youth careers, and

\$5,000 (through the American Association for Adult Education) for a study of school buildings; from the General Education Board, \$4,183 for the Bureau of Educational Research in Science and \$13,000 for the conference on and the study of school bus transportation; \$17,247 from various donors for the Institute of Practical Science Research; \$10,000 from the estate of the late Felix M. Warburg; \$7,500 from the Payne Fund (through the Civics Research Institute) for the study of social behavior; \$6,250 from various donors for the building fund of the Horace Mann School for Boys; \$5,000 from the International Circulation Managers Association for research in vocational education; \$4,000 from friends for a lecturer in music; \$3,251 from the friends and students of the Fine Arts Department for the Arthur Wesley Dow Scholarship Fund; \$2,450 from the patrons of the Lincoln School for the principal's emergency fund; \$2,400 from the American Council on Education for the study of teaching of English as a second language; \$1,000 from the Milbank Memorial Fund and \$1,750 from the American Philosophical Society for Professor Broadhurst's studies; \$2,000 from Mrs. Winter Mead for nursing education; \$1,215 from eleven patrons of Horace Mann School toward equipment of Thompson Hall roof; \$1,000 from Mr. Cleveland E. Dodge for the Dean's fund for general purposes; \$1,000 from the Alfred P. Sloan Foundation for the experimental trips of the Lincoln School; \$732 from the members of Faculty and staff of the College for the Marion Root Pratt Memorial Fund; an anonymous gift of \$600 for the course of study analysis project; from Kappa Delta Pi, \$400 for a research scholarship and \$250 toward the fund for refurnishing the Grace Dodge Room; \$500 from Mr. S. A. Lewisohn for the study of problems of penal institutions for youth; \$175 from the Daughters of the Cincinnati to supplement the John Chester and General Robert Anderson scholarships; \$150 from the Mary S. Rose portrait committee for research in nutrition; \$100 from the College Women's Club of Jackson Heights for their loan fund; \$98 from the patrons of Horace Mann School for the principal's emergency fund; \$50 from the Student Personnel Administration Club for the Romiett Stevens Memorial Loan Fund; an anonymous gift of \$50 for the student welfare fund; and miscellaneous gifts including books and equipment from Professor F. T. Baker, the estate of the late Professor Alice E. Bivins, Mr. I. J. Fox, Mr. and Mrs. Frank Greenwald, Mrs. Walter Landé, Professor Azubah Latham, Mr. Milton Loeb, Mrs. Vaughn Nash, the Parents Association of Horace Mann School, Mrs. Carl H. Pforzheimer, Dr. Alfred Worcester, and Dr. Thomas D. Wood.

Teachers College is primarily an institution for advanced education. Such of its students as are not college graduates are, however, by reason of their experience, equally mature. Most have already prepared for teaching in other institutions and have served in the educational ranks before coming to us for further study.

Nevertheless, Teachers College has always been interested in the education of the beginning teacher. We have close and friendly relationships with the normal schools and teachers' colleges; and many of the positions in these institutions are filled by our graduates. The group in the College headed by Professors Bagley, Evenden, Thomas Alexander, and Stratemeyer has long directed its efforts to the improvement of practices in the education of the beginning teacher; and it was under their guidance, along with Professors Del Manzo, Hager, Hayes, Linton, Mort, Newlon, and Powers, and Mr. Hagemeyer and Mr. Hungate that New College was administered for seven years. It acted as a pioneering, experimental unit, accepting high school graduates and demonstrating and testing a new plan for teacher education which emphasized an elaborate system of records and reports, a plan of individual guidance, a new relation of professional and subject-matter courses, the idea of teacher and school as a means of community organization and development, foreign travel and study, abolition of credits, grades, and points, and internship instead of practice teaching. New College proved to be an experiment difficult for a private institution to maintain in a large city. It failed to attract many students from outside of New York. It was difficult to finance.

While New College was trying an experiment in one plan of teacher education, other experiments were developing in other parts of Teachers College. Under the stimulus of a new policy of the General Education Board, the "general education" movement began to receive attention in many parts of the country. This was a new name, indicating a new interest in a movement looking to a new appraisal and application of the social, as contrasted with the scholastic and academic, objectives of education. Professors and teachers in the subject-matter fields began increasingly to assess and stress the contributions of their subjects to American life and

to reorganize their teachings accordingly. Substantial grants were made to Teachers College to support the work of the Bureau of Educational Research in Science under the direction of Professor Powers, which, in close touch with the scholars in other parts of the College and the University and in consultation with the leading practitioners in the field, has prepared a series of volumes basic to the formation of the science curriculum and has carried on educational experimentation as well. This year these materials are being tested in a number of different schools and colleges. Professor Tewksbury experimented with general education when he was Dean of Bard College, and since he was Director of New College during its last year and a half, and is now a member of our present committee on teacher training, he will have much influence in conserving the New College idea and in incorporating the general education idea in the next stages of experimentation in the education of beginning teachers which are now projected.

For several years past we have been called into consultation with the Deans of Columbia and Barnard Colleges with reference to their problems of teacher education. The Faculty of Barnard College has been critical of the requirements for certification set by the neighboring states, which if met during the four-year college course result in what to them seems to be a disproportionate share of time devoted to courses in education and practice teaching. The Faculty of Columbia College similarly believed that they could not give the basis for a liberal education and also prepare for teaching within the time required for the Bachelor's degree. Several years ago, Dean Gildersleeve, Dean Hawkes, and I recommended a five-year course for certain selected students in Barnard and Columbia, with part of the work in Teachers College, leading to a Master's degree under the Graduate Faculties; but consultation with the Columbia departments concerned did not show general approval. Last year we agreed to experiment with a three-year plan (beginning with the junior year) leading to the Master's degree in Teachers College under our present regulations, for a selected and recommended group of Barnard and Columbia juniors. Columbia College requires its students to prepare for teaching by the five-year plan. Barnard College wishes to try both the old and the new plan.

A new trend in the student body of Teachers College affords us an additional opportunity for experimentation in beginning teacher education.

We find that we are receiving, as candidates for the Master's degree, an increasing number of graduates of liberal arts colleges who have had no experience whatsoever in teaching, and frequently have never taken a course in education. For years we have organized our courses on the assumption that all or nearly all our students were already experienced and trained teachers. Today within our student body we find a group of students, sometimes very able students, who are ready for the most efficient and most concentrated plan of teacher education possible. Surely our usual program does not fit this group. Surely a better program can be devised.

All these opportunities for experimentation are being studied under a new plan of coöperation upon which we have entered with the Commission on Teacher Education of the American Council on Education, a group directed by Professor Karl W. Bigelow, who is on leave from Teachers College, and financed by the General Education Board. We have formed a committee composed of Professors Grey, Caswell, Evenden, Linton, Stratemeyer, Tewksbury and Del Manzo (ex officio) to act as a planning Board, and it is calling into consultation all members of the Faculty who are interested. There will be an experiment with the remaining students of New College, some of whom will be with us for three years. There will be an experiment with the undergraduates of Barnard and Columbia who will follow the five-year plan, and with the Barnard juniors who wish to teach after their four-year college course. There will be a new program offered to graduate students in Teachers College, inexperienced in teaching, which they may elect if they so desire.

A full report on the New College experiment is in process of preparation. Reports of the new experiments now in progress will be made from time to time as the results become known.

The problem of the future of the College schools is most complicated. These are not ordinary schools to be judged by usual standards. They have a place and function different, if not unique. The usual school is to be judged by its service to the pupils. Does it prepare for life? Does it prepare for college? Does it satisfy the parents? Is it, by standards generally accepted, a good school?

But the schools of Teachers College cannot be judged by these standards alone. We maintain them in part for their service to American edu-

cation. Do they demonstrate superior practice for American education in general? Are they objects worthy of study and imitation? Do they furnish other schools with ambition and inspiration? Furthermore, our schools have an obligation to science and knowledge. Are they pursuing significant research? Are they investigating areas which we do not know? Are they trying and testing unusual practices and procedures? Nor can the schools of Teachers College be judged alone by their services to their clients, the public, or science. They also have a service to render to Teachers College, not as our particular institution, but to us as one of many institutions that must use schools like these, as medical schools use the hospital, or agricultural colleges the experimental farm. Thus the schools of Teachers College have an obligation to the pupils and parents, to American education, to science, and to teacher education in general.

These are four different goals and appear to some degree mutually exclusive; but if all four conditions were ideal and the school itself first class, all four goals would be met equally well. Unfortunately, none of the conditions are ideal. The pupils are turned more toward preparation for college than in most American schools, and are brighter and learn more easily. Without the playgrounds and physical equipment of a good public high school, our schools find difficulty in demonstrating superior practice. It is a truism to state that educational research, especially research under school conditions, is most difficult to administer. Poor experimentation will hurt both education and demonstration; and parents have a horror of having their children used for experiments. Of course, doctors do it frequently; but then the doctor does not call and announce that he is trying an experiment. Furthermore, the institution for the training of teachers must not abuse a school; it must not use it too much. Thus, while ideally the right school rightly administered would serve all four goals equally well, in practice there is some conflict and wise administration must make some compromises.

The problem of these schools is not altogether educational. There is a financial problem as well, although the financial problem may well depend upon the educational. The Horace Mann School, since the depression, has incurred substantial deficits; while the Lincoln School has been forced to meet the problem of a steadily declining income by abandoning much of its research program or transferring it to Teachers College.

It has been charged that Teachers College desires to expropriate the

endowment of the Lincoln School for a purpose other than that for which the funds were given. These funds were given for "research." For several years past these funds have been used to pay for the education of certain New York children, with constantly decreasing attention to research, the purpose for which the funds were given. Troubled by this problem, in September, 1937, I appointed a faculty committee composed of Professors French, Caswell, O'Rear, and Tewksbury and asked them to review the whole problem of the college schools and make a report to me. This report, in summary, was as follows:

r. That the administration of these schools be coördinated by the designation by the Dean of a member of the Teachers College staff as a single administrative and executive officer for the affiliated elementary and secondary schools of Teachers College.

2. That this officer with the assistance of a coördinating committee appointed by the Dean be charged with developing plans for demonstration, observation, and participation under which the students and faculty of Teachers College would have in a school or schools operated by the College and/or in neighboring public schools operated jointly by the city and the College, the finest opportunity afforded to the students of any school of education for integration of the study and practice of education.

3. That this executive and administrative officer be charged with the administration of a coördinated program for all of the affiliated elementary and

secondary schools of Teachers College.

4. That these be the first in a series of steps by which Teachers College would move in the direction of a unified educational, administrative, and fiscal control of such schools, the implication being that coördination, elimination, and consolidation of services and facilities would result.

Following these suggestions, I thereupon created a new administrative division called "Educational Demonstration and Public Service," transferred all the schools to this division, and placed the Provost of the College at the head. Dr. Del Manzo at once began a program of study to determine the causes of our present difficulties and to suggest measures for improvement. He worked carefully and slowly. He conferred at length with teachers and parents, with professors and principals. At the same time there was made a special study of the Lincoln School by a group composed of Luther Gulick, Director of the Institute of Public Administration and Eaton Professor of Municipal Science and Administration, Columbia University; Floyd W. Reeves, Director of the American Youth

Commission of the American Council on Education and Professor of Administration at the University of Chicago; Alonzo Grace, State Commissioner of Education, Hartford, Connecticut; and Frederick H. Bair, Superintendent of Schools, Bronxville, New York.

We have set the date of December 1 as the time when all studies will be completed. The next two months will be spent in conference with all concerned. By the beginning of February we hope to reach a decision as to what action should be taken.

President Burton of the University of Chicago was chairman of the China Education Commission which vainly tried to consolidate the Christian colleges in China. I remember one day after a particularly discouraging meeting, when we had tried to promote some pitifully inadequate "university" into a good middle school, President Burton remarked: "A Christian will lay down his life for his friend, but he will not lay down the life of a Christian college." In business, when plants are changed, combined, or even abandoned, it is considered a sign of progress. Rogers Peet, in closing the Herald Square store, advertises that this is a part of a program of "progressive planning by the modern Rogers Peet." Closing or modifying or combining any part of an educational enterprise is so novel a policy of educational administration that it causes widespread concern, or gossip, or criticism. If experiments are to be started, experiments must be stopped. If anything new is to be done, in the long run something old must be abandoned. Even in education there are times of modification, adjustment, and combination. The only alternative that I can see is complete wisdom and prescience at the start, which certainly the present administration of Teachers College does not possess; or cowardice or lethargy, which would permit the prolonged continuation of every experiment undertaken.

I do not presume to predict the future, but every indication at this time points to the probability that if the schools of Teachers College are to strike the best balance between service to the pupils and parents, to the public, to science, and to the education of teachers, at a price which we can afford to pay, some plan of combination or coördination more intimate, efficient, and economical than at present is needed. Then, and only then, can we develop at Teachers College, as the faculty committee stated, "the world's outstanding example of the result of applying in typical school

settings, the best ideas, materials, methods and techniques of elementary and secondary education."

For many years past Teachers College has been devoting a large part of its effort to the problem of the education of the citizen. We know that democracy depends upon education; that whatever government or form of life we adopt, it too is determined by the education we receive. In his address to the House of Commons, Mr. Chamberlain stated that the British have no quarrel with the German people, only with the government they have allowed to govern them. In truth, the kind of rulers they have allowed to govern them depends in turn upon the kind of education they have had.

We at Teachers College have gone our way for many years past, making our contribution to the problem of the education of the citizen in our normal, natural way. That is, we have trained teachers in the field; we have written magazine articles; some of us have helped prepare or reorganize courses of study and curricula; we have written textbooks and have assisted with various educational projects. Some of the Faculty have helped in the preparation of the report on the teaching of the social studies sponsored by the American Historical Association; and much the same group, with certain additions, have been contributing to the labors of the Educational Policies Commission of the National Education Association; and special attention to the subject has been given, in one form or other, by members of the Teachers College Faculty and the staff of the schools. Several reports of the Dean Emeritus and of myself were devoted to this subject.

Much of the controversy over radicalism or conservatism, both internal and that conducted in or by the press, has its origin in a sensitiveness to this problem. The divisions within the Faculty of Teachers College are nothing more nor less than reflections of similar divisions in the public itself.

A year ago we were attacking the problems of education for citizenship by sending out trained teachers, by writing and lecturing, by preparing textbooks, by reorganizing courses of study, and by assisting programs of child education. At the same time, there was a fear that the country as a whole was moving too slowly. As the war clouds gathered and darkened in Europe; as the struggle between the dictatorships and the democracies became more acute; as sharp division paralyzed the French; as tendencies, conscious and unconscious, pushed us toward similar division here; as suspicion and bitterness among various parts of the people increased; as studies of our youth and appraisal of their ideas began to reveal a misunderstanding or ignorance of our government and way of life and consequently a suspicion that our schools needed new resolution and inspiration; and as we viewed a new first phase of warfare in Europe, namely, a war of press and radio calculated to destroy the will to independence by false education or propaganda, the only defense against which is education for judgment, understanding, and truth; then it became apparent that, for the safety and welfare of our country, we should take steps more speedily and more generally to attack the problem of the education of the citizen and to stimulate our schools and other agencies of education to do something about it.

We gave much thought to determining the proper method by which to undertake this campaign. There are activities in which it is proper for an educational institution to engage; there are those in which it is improper. There are duties and privileges reserved for the teacher; there are limits beyond which he should not go.

It was obvious from the start that professors and teachers do not form policy or determine objectives. In a democracy this is the right of the people, and teachers and professors can only share in policy-forming by their status as citizens. What the program of education for citizenship shall try to do, what its aims are, is a problem for all the people of the United States. Teachers, or professors, or Teachers College itself can devise a curriculum, or prepare materials of instruction, or test and recommend methods of instruction; but in determining what the educational objectives are to be, teachers, professors, or Teachers College itself should have no part other than that pertaining to citizenship, in the same sense that all citizens of the United States have this right and obligation.

The problem was to study the way in which the people make their educational decisions; and then to see if there was any way in which we might make the people realize the importance of the problem, help them to see it straight, and hasten action in practice.

The theory of educational administration in the United States is for the people to elect a small committee from among themselves to run the schools. In the early days, the school board of the small school district decided who would teach, what should be taught, to whom, for how long, under what conditions. The people, in neighborly contact with the school board, exercised their will by personal suggestion and complaint. Today there is relatively little power left in the small school districts. It has been centralized in great cities and states; and the people rule through their city boards of education, state boards of education or regents, and state legislatures. No longer do we have personal contact. We delegate educational power to our representatives.

But, in modern practice, these board members, regents, and state legislatures, theoretically the holders of our mandate to decide educational questions for us, are not allowed to run free. We put all kinds of pressure upon them, not so much individual pressure, as in the days of the district school, as group pressure. We form ourselves into associations, like the American Federation of Labor, or the American Legion, or the Grange, or the Parent-Teacher Association, and as associations we study educational problems and adopt policies, which as groups we urge upon our representatives who rule the schools. Business groups have tried to keep down expenses. Patriotic groups have tried to curb radicalism. Farm and labor groups have tried to secure greater equality of opportunity. Sometimes special and peculiar interests have been pushed in this way.

Thus the philosophy of American education is not determined by professors or philosophers; it is the will of the people. This social practice is strong in that it reflects the wishes of the majority. Its only weakness may be that it may not reflect their considered wishes. If educational decisions are the result of half-considered, ignorant, or prejudiced policies, then the educational program which results will fail of popular support in the hour of need or be abandoned in the face of criticism. The people must come fully to understand their responsibilities. They must make their educational decisions wisely.

It was to consider this relation of laymen to education and to advise me as to its implications, that we created the Lay Council a year ago. Winthrop W. Aldrich accepted the appointment as chairman, and the other members were Walter S. Gifford, Walter E. Hope, Henry James, Elihu

Root, Jr., and Arthur Hays Sulzberger, with C. J. Langley as secretary. The first discussions carefully explored the possibilities of wider representation, both geographically and philosophically; but the need of frequent meetings and regular attendance made us decide to keep the number small. The Lay Council has no legal organization. It has no powers. It has acted as an informal discussion group, exploring the possibility of greater coöperation between educators and laymen; and to make sure that no one social or sectional point of view should prevail, it was resolved that no action whatsoever should be advised or supported without the coöperation and previous criticism of representatives of many sides of American life.

The Lay Council believes that in a democracy improvements come from the people up, not from the top down; from popular consent, rather than government edict; from the ideas and desires of the electorate, not from the dictates of legislatures or government functionaries; and that any move to strengthen American education must be made in harmony with this philosophy. The Lay Council encouraged me in continuing the discussions with certain of the great lay organizations, which I reported last year. The purpose was to ask each organization to appoint a special committee on education, to work with similar committees appointed by other organizations, all to work together with a committee of educators representing all phases of American education from the kindergarten to the university, including technical and adult education.

The most important problem to attack first was, of course, education for democracy. A combined meeting of the committee members, each officially appointed, is termed a congress. So we called a Congress on Education for Democracy, terming it at first a "World Congress" because of the international nature of the problem. Later, at the suggestion of the Advisory Committee representing most of the coöperating organizations, we dropped the word "World," because, after all, our aim was the improvement of American education, and although we might secure foreign speakers, there was no provision for official delegates from foreign lands.

There is no need, here, to report upon the Congress on Education for Democracy, which was held at Teachers College on August 15, 16, and 17, 1939. The attendance far exceeded our expectations. The papers presented were of the greatest significance. The seminars afforded the dele-

gates the opportunity to work together for two days; and the reports of these groups, inconclusive to be sure, formed the basis for discussions which will continue. Some of the seminars were not as widely representative as might be wished.

The public interest in the meetings also exceeded our fondest hopes. The press carried a full account. We had the finest coöperation from the broadcasting companies. We invited a notable list of leading citizens of the metropolitan area to sponsor the Congress; and the response was most encouraging.

The radical press, as might be expected, was sharp in its criticism, terming the Congress a "sell-out" to business; although business seemed to be the least satisfied.

The Congress was well administered; and my thanks are especially due to Professor Briggs who acted as chairman of the Faculty Committee; to Professor French, who dealt with the program and the Committee of Educators; to Professor Bryson, who organized the seminars; to Mr. Langley, who made contact with the business groups and acted as general administrative assistant until June, and to Mr. Prosser, who succeeded him; to Mr. Linden, who had charge of all physical arrangements; to Professor Bruner, who had charge of official guests; to Professor Lee, who had charge of all delegates and who made contact with labor; to Professor Cyr, who acted as liaison agent with agriculture, Mrs. Cowles with women's organizations, and Director Mort with research agencies; to Professor Johnson, who arranged the meetings on religion; to Professor Fretwell, who organized the meetings on the youth agencies; to Dr. Brunstetter, who prepared the exhibit of materials; to Miss McGinnis, who administered the tea and supper; to Messrs. Linn, Wright, and Claes, who handled the problems of buildings and grounds; and to Miss Sheridan, who, as Executive Secretary, watched over it all.

The Congress was a spectacular affair, more spectacular in realization than it ever had been in our imagination. It revealed the deep concern of the American people. It showed their eagerness to go ahead. It testified to the correctness of our estimate that the way to work was through committees of the lay organizations.

This is only a beginning; and much must be done henceforth if a new program of education for American citizenship is to be sponsored by the people and carried out by the schools, colleges, and other means of education.

Some means must be devised to keep the lay organizations interested, their committees active, their educational policies their own, with a minimum of prejudice, ignorance, and self-interest. There should be a closer contact with educators and schools. There should be regional and local meetings attended by laymen and educators. This means that this organization which we have termed a "congress" should be kept alive. It should not be part of Teachers College or of any other educational institution. It should be as big as the United States and as independent.

Further, any program of education for democracy, however clearly determined and however generally recognized as needed, will await teachers trained to carry it into effect, or easily used materials which will enable teachers now in the schools and workers in adult education immediately to commence effective work. We shall need pamphlets and books; films, charts, and slides; study guides, club programs, and discussion outlines. All this must be prepared properly, in simple form for the young and uneducated, and as detailed and thorough as possible for the most advanced. There is plenty of work to do in education for democracy even in our graduate schools. This is a task for our institutions of higher learning, and I hope that in this program Teachers College may be enabled to play its part.

The proper training of personnel and the preparation of material can be well started with the knowledge that we now have, but they cannot be carried on long without fundamental research. Four years ago, when I reported to you upon one phase of this problem, I suggested that the citizen could not be properly prepared for it in time without a good knowledge of political economics. I suggested that the favorable reaction of the people to such governmental ideas and practices as Social Credit, the Townsend Plan, and unbalanced budgets was caused by ignorance of the previous experience of mankind. The idea seemed sound to me, else I should not have submitted it to you. I received much favorable comment elsewhere. The *Atlantic Monthly* reprinted that report. But nothing happened; and the tendency against which I was arguing has increased, with old-age pensions in many states and "Thirty-dollars-every-Thursday" in California. That some kind of political legerdemain has pre-

vented the realization of these foolish ideas in California and Alberta does not discount the fact that the voters made foolish decisions; and, unless wisely educated, will be foolish again. I believe the reason that nothing has been done is that the problem is first one of research. We need to know more. We need a thorough historical study of economics in politics; and the lack of this prevents the preparation of materials of instruction and the proper training of teachers and workers in the field. Every phase of the problem of education can be attacked right now. A beginning can be made. But a proper handling of the problem demands further study, investigation, and experimentation, which we call research.

Thus, to save our country and to hand it on to our children as our fathers gave it to us, we need a new program for the education of the citizen. We at Teachers College have made a good start. We must go ahead. We believe that the most promising avenues of approach are: first, the implementation and perpetuation of the Congress, at least for an experimental period of five years, as an independent organization; second an organization within Teachers College for the training of personnel and the preparation of materials; third, the prosecution of fundamental researches in the preparation of materials to aid in discovering proper methods of teaching.

According to this analysis, it can be seen that the academic year 1938–39 is not so much a year of accomplishment for Teachers College as it is a year of transition. For many years past, during the administration of the Dean Emeritus and during the twelve years since his retirement, we have been considering these three problems: the training of the teacher, the function of the schools, and the education of the citizen. Many steps have been taken, many adjustments made, many successes achieved. Yet this last year, owing to a combination of circumstances, Teachers College has suddenly re-attacked all three, has made fundamental moves, and is working toward a new stage in each.

The onset of war in Europe leaves us disheartened. With the black prospects before us, it is difficult, even presumptuous, to make recommendations as to next steps.

For we seem to have gone back even beyond the Dark Ages. It is almost impossible to bring oneself to believe that once again brute force stalks

the world; that pirates infest the seas; that aerial Attilas sack cities, killing women and children; and that treaties are violated and pledges broken. Long since, the walls of Paris have been demolished, but France hides behind the Maginot Line; and for the first time since the days of Stonehenge, Britons are again happy to flee to caves.

We in America are particularly dejected and discouraged; for we had hoped that we had gone beyond this way of life. We know that there is nothing strange in power politics; that man has always been ruled by force. Our knowledge of history tells us that princes have often plunged their people into war to satisfy their "insane ambitions," and that, in fact, except for the Pax Romana, war has been man's constant state.

But we are children of the eighteenth century. We thought that the dream of the *Philosophes* had come true. We believed in the realization of the world of the Enlightenment. Those who gave us the ideas lived in a world of privilege; yet they believed that men could arrange their existence so that they might have that common share in government, similar standing before the law, and open door to opportunity which is called equality. They were under the yoke of tyranny over conscience, thought, speech, over property, person, and economic life—the protest against and the relief from which they termed liberty. They were desperately poor, but they knew that man could invent, grow, make, manage, and produce all that he could need, if he would only apply his intelligence to his life, and that happiness could come. It was liberty, equality, and happiness that the fathers set out to achieve. They tried to build a new world characterized by its respect for the individual man.

We Americans have never been quite sure whether this new world was in process of achievement in Europe. In fact, there is some reason to believe that the Europeans themselves were never convinced that it was possible. "They were too thoroughly imbued with pessimism ever to think that it was possible to be happy; the most they could hope for was to be less unhappy." This explains the trust of Americans in their wide seas, and it is a contributing cause to our rebellion from Old Europe, our failure to join the League of Nations, our neutrality legislation, and our fear of entangling alliances.

But we believed that we had made a new world here! And we continue

<sup>1</sup> Gilbert Chinard, Thomas Jefferson (Boston, 1929), p. 75.

to believe it. Europe can return to pre-history. We hope that we on this continent may remain civilized. Slender as this hope may be, it gives us courage. It is for us to guard liberty, equality, and happiness. We must defend democracy.

In submitting an extended memorandum on the defense of democracy as part of my last annual report, I developed a suggestion that I found in Montesquieu, that the corruption of democracy occurred when there was either too much or too little equality. It was plain to be seen that there could be tyranny by the mob just as well as tyranny by the privileged, and that democracy depended in part upon a balance or mean between extremes. This mean between extremes could be seen to be changing, now in one direction, now in the other, always responding to the pressures of a variety of social forces. Some of these forces proved to be beyond the control of man, some within his grasp; and chief of these man-controlled forces was education, the most powerful and flexible of all; and it was my conclusion that education for the defense of democracy consisted in constantly restoring the balance.

In further development of this thought, it can be seen that the corruption of democracy is not caused solely by a perversion of the idea of equality. The other goals of democracy—liberty and happiness—are also means between extremes, extremes which are dangerous and equally liable to perversion, and against which we must defend ourselves. Thus liberty is a mean between tyranny and license, each of which is deadly to democracy. Poverty brings revolution, but the opposite extreme of opulent materialism also destroys a people. Democracy must avoid the extreme. It must hold to the balance.

It is difficult to keep this balance. The tendency is toward the extremes. Liberty will degenerate into license or yield to tyranny unless man is educated to control himself. The pursuit of happiness—"the enjoyment of . . . the means of acquiring and possessing property, and pursuing and obtaining happiness and safety"—depends directly on education. Only through technical education can the people secure the scientific skill and knowledge necessary to provide for our material wants. It is by education that man can hold to the mean. It is by education that man can work against the forces that unbalance us.

Chief among those forces of unbalance is war. War is the great unset-

<sup>&</sup>lt;sup>2</sup> George Mason in the "Virginia Bill of Rights," the text of which Jefferson is believed to have had in mind when he wrote the first paragraphs of the Declaration of Independence.

tler. It is the enemy of moderation. It puts a premium on fury. It penalizes good sense. Time and again democracy has wilted before war. Then it is that the dictator and the communist stand ready to pounce.

Military combat may be localized. Fighting may be confined to a narrow area, but ideas and feelings know no national boundaries. Unsettling forces are now playing upon us; their impact will increase; and sooner or later we shall have a war psychology. Then we must rush to our defense. Democracy—our republic, the American dream—challenged abroad, will be directly challenged at home when warlike ideas begin to take hold. So long as the conflict lasts, we can expect an increase in the power of the forces which push us off center. It is for us to exert every effort to keep the balance. Then, as never before, shall we need education to preserve the American ideal. If we agreed that we needed education for democracy in peaceful August, in warring September we need it ten times over. Our people must know that they are the heirs of a great tradition, one that is under the severest attack, one that they must defend with courage and confidence.

As Washington was retreating across the New Jersey snows in the winter of 1776, Thomas Paine, by the light of a campfire, with a drumhead for a desk, wrote the following words:

These are the times that try men's souls. The summer soldier and the sunshine patriot will, in this crisis, shrink from the service of their country; but he that stands it *now*, deserves the love and thanks of man and woman. Tyranny, like hell, is not easily conquered; yet we have this consolation with us, that the harder the conflict, the more glorious the triumph.

It is to battle tyranny, privilege, and poverty that American teachers are called to arms; and like hell, these evils are not easily conquered. We must lead our people to judgment and balance, avoiding license, mob rule, and materialism, that liberty, equality, and happiness may live in a world gone mad. This is the hard conflict in which Teachers College now engages. May there be an early triumph and one that is glorious.

Respectfully submitted,

WILLIAM F. RUSSELL,

Dean

### COLLEGE OF PHARMACY

## REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

# To the President of the University

#### Sir:

In conformity to the Statutes of Columbia University, I herewith submit a report on conditions at the College of Pharmacy during its one hundred and ninth year.

The enrollment still remains low and consequently presents a discouraging picture from the financial standpoint. However, reports from other sections of the country indicate an increasing demand for licensed pharmacists, and eventually the same condition may prevail in this area. Statistics from the Registrar's office show a distribution in the several classes as follows:

## Undergraduates

Third year Ph.G. cours	se .							79	
First year B.S. course									
Second year B.S. cours	e.							52	
Third year B.S. course								32	
Fourth year B.S. course	e .							35	
							-	—	235
Graduate students									6
Non-candidates									90
Total registration .									331

The adjustments incidental to the operation of the first two years of the program established in 1937 have been accomplished with little difficulty, and the minor modifications made therein have been based on experience gained through actual operation. The objective of a general and professional education for pharmacists within the confines of a four-year course, and with neither overshadowing the other, appears to have been gained. It is encouraging to find among our matriculants increasing numbers of students with one or more years of general collegiate training. Perhaps the number would be greater but for the restriction placed upon

residence credit in such instances, for not more than one year of time credit can be given for previous collegiate study. On casual thought it may appear that this regulation is unreasonable in its application to those already possessing a Bachelor's degree, and more especially since the pharmacy program consists of both general and professional courses in about equal proportions. However, the justification for the regulation is that the applicant with the baccalaureate degree rarely possesses credentials including all of the general studies included in the pharmacy program. Even those presenting pre-medical or pre-dental credentials, which more nearly approach the general educational requirements in pharmacy, lack the basic courses in the principles and practice of pharmacy which are prerequisite to the professional work in this branch. Nevertheless, an applicant with credit for one year in Columbia College can generally be given sophomore standing in pharmacy, and those with greater amounts of credit, although they must be in residence for three years, frequently can have reduced programs, especially in their second year.

Several minor modifications of the original program established in 1937 have been proposed and approved. For purposes of record these are briefly stated in this report. The preliminary course in physics (*Physics* A4ph), for those not offering this subject at entrance, has been discontinued. As a far greater amount of pharmaceutical foreign language reference material is in German rather than in French, the scientific reading course in the latter language has been discontinued, and all students must pursue the scientific reading course in German. Bearing in mind that only about one-third of the applicants present German credits from the secondary school, two sections have been formed, one for those with such previous knowledge and the other for those without. Finally, this foreign language teaching has been deferred until the second year, and the mathematics courses have been substituted for it in the first year. The necessity for a foundation of mathematics upon which the physics and chemistry teaching may rest has rendered this transposition advisable. The teaching of physics in the second year has been under the direction of Professor Farwell, and the pharmacy students have had this instruction at the Pupin Physics Laboratories in common with the University classes in this branch. This procedure has brought the pharmacy group into direct contact with the other undergraduate students at the University.

Aside from the additional facilities, it has had great value in partially eliminating the feeling hitherto prevalent among pharmacy students that they are in Columbia University but are not part of it. It has brought the responsibility of keeping pace with the general level of achievement of the Columbia student body, but that has been gladly accepted.

The changes in the professional aspects of the program are considerably greater than those enumerated above. The professional courses of the pharmacy curriculum rest upon the knowledge necessary for the conduct of the average retail pharmacy. All of this knowledge may not be required in any particular pharmacy at all times, but any of it may be necessary to deal with a particular problem encountered. The limits of pharmacy have been defined as "knowing a little about a lot of things." The sweeping changes in medical practice and the great advances in chemotherapeutics, bacteriology, and other fields which are related to pharmacy have all affected the nature and scope of teaching. All too often have new needs been met by the establishment of separate courses rather than by absorption in already-existing courses, and with this but few of the latter have ever been abandoned. In time this has resulted in a multiplicity of courses, particularly in the Division of Pharmacy. Evidence of this situation is apparent in the National Syllabus, which specifies separate courses of sixteen or thirty-two hours devoted to branches which might better be considered as subdivisions of some major course. The Division of Pharmacy of this College is rearranging the program with a view to absorbing these lesser courses in the appropriate major courses. Where courses in theory have heretofore been administered separately from those in laboratory, the former have largely been combined under the new arrangement. Pharmaceutical Latin has been included in dispensing pharmacy; pharmaceutical mathematics has been included in operative pharmacy.

Those in close touch with pharmaceutical education have long realized that the drugstore is not the only field in which pharmacy graduates find employment. Our placement lists show a fair number in the service of hospitals, and a still greater number find employment in the pharmaceutical industry. While it is necessary to adhere to the established pharmacy curriculum so that our graduates will be eligible to the licensing examinations, it has been possible to provide a limited elective program for the

second session of the final year. It is hoped that this will pave the way toward providing a still greater amount of instruction for students desiring to enter the many fields related to pharmacy. Perhaps this preparation will eventually involve the superposition of a year or more of schooling on the baccalaureate course.

In addition to these modifications of the undergraduate program, the requirements and regulations surrounding graduate study have been materially modified with a view toward establishing greater parity between the degree of Doctor of Pharmacy and that of Doctor of Philosophy. The time has arrived when the candidate for admission to graduate study in pharmacy should prove his ability through a period of directed study in his chosen field before being formally received or permitted to pursue research. Obviously, this policy probably will require that the candidate be in residence for more than the two years heretofore specified. Also, in certain graduate fields well within the scope of the College of Pharmacy, the basic study of the average undergraduate pharmacy curriculum should be supplemented by graduate studies to give a more adequate basis to the research. It is believed that this will be accomplished by the requirement that at least one such graduate course be pursued in departments of the University other than the School of Pharmacy. While in many university schools of pharmacy the Doctor of Philosophy degree is conferred for graduate study, we believe that the retention of the Doctor of Pharmacy at Columbia, surrounded by proper provisions, is advantageous both to the University and to the profession of pharmacy.

For several years the College of Pharmacy, through evening courses, has provided instruction in clinical laboratory procedures for qualified students. As this instruction is not available elsewhere in Columbia, the majority of these students are referred to us by the Secretary's Office and, in some instances, by the Medical School. Many are employed by institutions or physicians to perform the chemical and microscopical laboratory procedures which have attained such importance in relation to diagnosis. These people, generally known as technicians, are laboratory workers. Their work is to perform tests which involve both ordinary and extraordinary laboratory methods. They should have not only a general educational background, but also, in addition, they should have a thorough training in chemistry as well as in the other fields into which their work

extends. Their work should be performed with accuracy and understanding, for their findings are frequently a factor in assisting the physician in diagnosing disease. Several business schools have exploited this field as one of interest and promise for high school graduates, especially women. Their courses include the usual business subjects and, in addition, the full range of clinical laboratory procedures, the teaching of which would tax the resources of an established scientific school. This work requires far more chemistry and biology than are included in the secondary school program, yet these prerequisites are not demanded of applicants. Hospital laboratory experience is also requisite, but no mention is made of this. The graduates of these schools may or may not gain employment in the field for which they are supposedly prepared. Nothing has been done by any state or professional agency in this area to insist upon a thorough system of training in a recognized educational institution for these technicians. The situation is not due to lack of an educational program, for the proposals of the American Society of Pathologists regarding the training of technicians appear to be adequate and are in operation in other sections of the country. There may be a natural curiosity as to the interest of the College of Pharmacy in this matter. This interest is based upon three factors: First, the combination of studies of the approved pharmacy curriculum, and especially the large amount of chemistry, serves as an excellent foundation for the clinical laboratory field. Second, a large proportion of those receiving instruction in our evening courses are actually employed in this work. Third, while such instruction might well be correlated with the work of the medical schools, the latter have so expanded their activities in the graduate and public health medical fields that further additions may not be advisable at this time. Another aspect is that the pharmacy colleges of several universities have long included instruction of this type in their regular programs. It is hoped that this College will eventually offer both the basic and specialized training necessary in this field, more especially in view of the importance of New York City as a medical center.

Hospital pharmacy has aroused so much interest in pharmaceutical circles that a section dealing with this activity has been formed within the American Pharmaceutical Association. Recognition of the fact that dispensing functions should be performed by licensed pharmacists rather

than by nurses and other hospital personnel has given further impetus to this specialization of pharmacy. These facts and others raise the question as to the part the pharmacy college should play in preparing pharmacists for hospital service. In certain instances, the colleges are so situated, by organization or otherwise, that all students can serve in the hospital pharmacy connected with the university. In other instances, lecture courses dealing chiefly with organization, administration, and procedures peculiar to this branch of pharmacy are relied upon. Probably neither of these methods by itself is entirely satisfactory, and an effort will be made to secure definite information from varied sources as to the needs of hospital pharmacy practice before making provision for this field in our instruction program. A proposal has been received from the New York Hospital looking toward the creation of pharmacy internships in that institution. The plan is similar to that established for medical interns and is worthy of serious consideration. However, an essential difference between pharmacy and medicine as regards licensing requirements must be given due weight. The pharmacy graduate is not eligible to the licensing examination until he has had a specified period of experience in a registered pharmacy, and this is comparable to internship. It is interesting to note that the women graduates of this College have attained a very definite position in hospital pharmacy and are acting as pharmacists in Presbyterian, Manhattan General, Skin and Cancer, St. Vincent's, West Side, Ruptured and Crippled, Memorial, Mary Immaculate, Manhattan Eye and Ear, Misericordia, New Rochelle, the Methodist-Episcopal, Woman's, and Welfare Hospitals.

The real measure of the usefulness of a professional or vocational school can only be had by inquiry as to the careers or placements of its graduates. The Alumni Association is at present making a survey of our several thousand graduates to ascertain their occupations and also to enable the College to act as an intermediary in securing employment. Although the census is far from complete at this writing, it has furnished important data for several purposes. Analysis of 650 returns shows:

			P	er Cent
Unemployed, or desiring more employment				. 5.0
Employed in retail pharmacy				. 16.0
Employed in retail pharmacy, but desiring change to other f	ield	s.		. 4.0

Proprietors of retail pharmacies										45.0
Executives, sales and promotion										7.0
Laboratory positions										4.0
Hospital pharmacists										3.0
Physicians										4.0
Dentists										1.0
Other professions .										0.6
Teaching										3.7
Civil Service										2.0
Miscellaneous and re	tire	d								4.7

The low percentage of unemployment is contrary to general opinion in pharmaceutical circles and is a source of encouragement, especially as the figure includes both those of advanced age and some graduates of 1939. Although the greater number of graduates are engaged in the business and profession of pharmacy, there is a diversity of occupations in this tabulation which may be due in part to the diversity of the pharmacy curriculum. However, this diversity of occupation does not go beyond the broad confines of pharmacy. It is indeed gratifying to find that there are sufficient fields open to the pharmacy graduate so that he need not consider the pharmacy course as a steppingstone to other professions and, notably, to medicine. A small number have become physicians, and, according to their opinions, the previous contact with pharmacy has been of decided advantage in their practice. However, for several years past, entrance to medicine via pharmacy has not been looked upon with favor by medical educators. Whether or not the adoption of a four-year course which includes a substantial portion of the pre-medical program and leads to a baccalaureate degree will result in a change in this opinion remains to be seen. Meanwhile, pharmacy offers ample opportunities and these have been greatly increased by recent drug control legislation.

For many years the College has been carrying two educational programs simultaneously, but with the graduation in May the one leading to the degree of Graduate in Pharmacy passes. Although the Graduate in Pharmacy course did not include instruction in general collegiate subjects and stressed the pharmaceutical applications in others, it was not a mere technical program limited to the minimum requirements of the drug store. The great majority of those engaged in retail pharmacy today are products of this sort of training, and, with few exceptions, they are suc-

cessful both from the professional and the business standpoints. The passing of the program is due to the general advancement of levels of education in all fields rather than to any inadequacy. The degree of Graduate in Pharmacy was first awarded over a century ago and has been awarded continuously since then. Its discontinuance marks the close of one period in the history of the College and the beginning of another.

Adjustments incidental to the operation of the program adopted in September, 1937, have necessitated further changes in the teaching staff. Jacob S. Dorfman, Assistant Professor of Pharmacy since 1925, leaves the service of the College with the good wishes of the Faculty and my personal regret that a diminished student body coupled with financial considerations results in the loss of a scholarly gentleman. Victor Lewitus, Instructor in Materia Medica since 1927, tendered his resignation effective October 1, 1938, to enter the service of the Hoffman-La Roche Company. Alfred G. Mercuri, Instructor in Chemistry, resigned March 15, 1939, to enter the employ of Parke, Davis and Company. Saul A. Bell, Instructor in Chemistry, on the expiration of his term of appointment June 1, 1939, was appointed Bigelow Fellow for 1939-40. The services of G. Bradford Smith, Instructor in English, Henry C. Hatfield, Lecturer in German, and Dr. Herbert K. Stone, Lecturer in French, all specifically appointed for the 1937-38 term, were not required during 1938-39. Horace T. F. Givens, Instructor in Chemistry, has been advanced to Associate in Chemistry and placed in charge of organic chemistry. Mr. Siegfried H. Muller was appointed Lecturer in German on the nomination of Professor Robert H. Fife. The instruction in physics was assumed by Professor Hermon W. Farwell with Mr. George L. Weil as Assistant.

Very frequently a humble employee of an educational institution exerts an influence upon the student body out of all proportion to his status. John Goetz, custodian of the Pharmacy building since 1893, was a typical illustration. He was self-appointed mentor to the student body, and the older generation, especially, will regret the death of "Old John" on May 12, 1939.

In this age, keeping abreast of the times in an occupation is fully as important as the formal education necessary to entrance thereto. The past few decades have brought revolutionary changes in medical practice, and these have been accompanied by equally important changes in types of

medication. The Medical School has made provision whereby the physician may continue his education in specific fields without too great interference with his practice. The College of Pharmacy, during the past Spring Session, made similar provision for the pharmacist. A series of twelve lectures was organized, and the program included "Vitamins," "Hormone Products," "Medicaments in Blood Therapy," "Biological Products in Pharmacy," "Recent Nonofficial Preparations," "Emulsions," "Business Problems of Professional Pharmacy," "Ophthalmic Solutions," and "Newer Synthetic Remedies." As this was an experimental project with a view toward ascertaining if pharmacists would voluntarily give up one evening each week to add to their knowledge, no fees were charged. The response was excellent, and attendance averaged 200 each evening. The majority of those attending were registered pharmacists, and the topics were restricted to those of a professional nature. The project showed clearly that pharmacists have an interest in the professional aspects of their calling even though the exigencies of livelihood necessitate inclusion of the commercial. With the experiences of this year as a basis this educational work will be continued.

The inadequacy of tuition fees as the sole means of support and the establishment of sustaining and endowment funds are matters mentioned in my report for last year. The Board of Trustees has continued its activities in relation to these financial matters, and although progress is slow, the effort is unremitting and has been productive. Maintenance of adequate educational activities continues to entail a deficit, and that this has not reached unbearable amounts is due to the generosity of the several individuals and firms who have contributed to the Sustaining Fund. Irrespective of the amounts received from these sources, they are an indication of belief in the soundness of our educational policy, and this encourages us to persist.

The gift of Miss Elise W. Friedgen, in memory of former Trustee Charles Friedgen, has a very personal significance. For many years the pharmacy bearing his name was conducted by Mr. Friedgen. My first contact with pharmacy and with many members of the University family was in the establishment at Amsterdam Avenue and 120th Street. Contiguous to the University and made even closer by the close friendship

between Mr. Friedgen and many in University circles, this pharmacy is a landmark at Columbia.

It is realized that the Endowment Fund, although of lesser immediate importance, is a more dependable supplementary source of financial support than the Sustaining Fund. While the growth of this fund is slower than that of the Sustaining Fund, each contribution represents an addition to capital resources and therefore adds to the stability of the College.

The Alumni Association has assisted materially in securing contributions to the Endowment Fund. It has contacted all graduates, secured contributions and pledges from a fair number, and, above all, it has made a start in creating that sense of personal interest which leads to tangible expression through alumni and class funds. The list of donors to both of these funds is lengthy, and provision will be made for its publication at a later date, unless contrary to their wishes.

Several changes in the list of officers and Trustees have occurred. Dr. Edward Plaut, for many years chairman of the Board, has relinquished this position to become a Trustee. Dr. Plaut rendered invaluable service in the educational adjustments during 1936 and 1937, and a good measure of the success of our present program is due to his understanding of the educational situation in pharmacy. Owing to pressure of business affairs, Mr. S. Barksdale Penick, treasurer since July 1, 1935, has found it necessary to withdraw from active service. Mr. Penick's business acumen has been of immeasurable value in directing the financial aspects of our College, and we have assurance of his continued interest in the institution. Dr. H. Sheridan Baketel assumes the chairmanship of the Board, and his general knowledge of pharmaceutical, medical, and teaching interests will go far toward making his occupancy of this position successful. Messrs. James C. Chilcott, William J. Schieffelin, Jr., Arthur J. Bauer, and Dr. Moritz Dittmar have relinquished trusteeship to accept the positions of second vice-president, third vice-president, treasurer, and assistant secretary respectively. All of these men are moved to this action by the common motive of greater service to the College. Vacancies on the Board of Trustees have been filled through the election of Mr. Frederick Griffith, secretary of the National Association of Chain Drug Stores; Dr. Charles Higgins, of the Lederle Laboratories; Mr. Percy C. Magnus, of Magnus,

Mabee and Reynard; and Dr. Edwin L. Newcomb, secretary of the National Wholesale Druggists Association. These men enter the service of the College at a difficult time, but their willingness to do so is an indication of their confidence in the ultimate outcome of this critical period.

Despite the continuance of the adverse conditions commented upon in the last Annual Report, research by members of the staff and graduate students has not been entirely neglected. The fields of pharmaceutical chemistry, industrial bacteriology, food and drug microscopy, together with that portion of pharmacology which falls within the scope of the pharmacy school, abound with research problems. Physical equipment and capability in direction are available in the College of Pharmacy. All that is lacking is financial support to enable us to lighten teaching loads to a point where greater research duties may be assumed by the staff.

President Fosdick, of the Rockefeller Foundation, in commenting upon tasks ahead for medicine<sup>1</sup> specifically mentioned chemotherapy and pharmacology as fields presenting unique opportunities in teaching and research where large sums could effectively be spent. Although Dr. Fosdick mentions both under the general head of medicine, there are many aspects of each which are within the province of pharmacy. In chemotherapy, sulfanilamide and salvarsan are cited as illustrations of the rôle the laboratory plays in this phase of medicine. Both originated through the efforts of chemists, and pharmaceutical laboratory production was necessary before the products were available for clinical use by physicians. Under pharmacology it is stated that American medical schools are notably weak in teaching on the applied side—the administration of drugs. Administration of many drugs, and particularly of the modern synthetics, requires that they be in a suitable form, and therefore pharmacy, which is defined as the art of preparing and compounding drugs, enters the situation. With the unparalleled medical, pharmaceutical, chemical, and clinical facilities available at Columbia, at least some of the objectives presented in this report should be attainable.

The following investigations by individuals or in collaboration with graduate students may be recorded: *Tribolium* infestation in flour, by B. L. Blumberg, in collaboration with Professor Ballard; the synthesis of some isomeric azobenzene-sulfonchloramides for consideration as pos-

<sup>&</sup>lt;sup>1</sup> The Rockefeller Foundation, A Review for 1938, pp. 30 and 32.

sible chemotherapeutic agents, by Seymour Stern and Professor A. Taub; the correlation of histological and morphological characters as an aid to classification in the genus Delphinium, by Joan Coons, in collaboration with Professor Ballard; a procedure for the identification of commonly used waxes in admixture, by Samuel Zweig, in collaboration with Professor Harry Taub; sex differences in conjugating strains of Paramoecium aurelia, by H. R. Halsey; changes in alkaloidal content of mold-infested drugs, by Professor Hart; bacteriostatic action of compounds of the azobenzene sulfonchloramid series, by Professor Hart; methods of determining the cholesterol content of wool fats, by Professor Wimmer; the influence of hydrogen ion concentration upon dentine sensitivity, by Professor A. Taub, in collaboration with Harold Osserman, D.D.S.; continuance of the study of the efficiency of enteric coatings for capsule medication, by Professor Horace M. Carter, in collaboration with Professor Meleney of the College of Physicians and Surgeons; a study of sulfur ointments for dermatological use, by Professor Horace M. Carter, in collaboration with Clinical Professor Abramowitz of the College of Physicians and Surgeons.

In my report of last year I divided my recommendations for the welfare of the College into those dealing with finances and those pertaining to educational matters. Basically, this division is an arbitrary one, for although the Dean is primarily concerned with educational administration, he cannot disregard the financial aspects involved. Although the financial needs mentioned in the last report are still of grave importance, the plans for meeting them have crystallized into activity. The results have fallen far short of the objectives set, but the very fact that action has replaced discussion gives promise of ultimate attainment. Through readjustments, and economies, the estimated deficit for next year has been materially reduced without impairment of the educational structure. The real problem is to secure sufficient subscriptions to the Sustaining Fund to tide over until an adequate endowment is accumulated.

In educational matters during the past two years the College of Pharmacy has been far from static, and this condition is eminently desirable as a corrective of a complacency which may readily result in senescence. Partial progress has been made within the College in regard to the liberalization of the program so as to permit election of work in fields of par-

ticular interest to the student. Efforts at further liberalization which would involve other educational units of the University have been temporarily deferred. Rearrangements in the graduate program make possible both the enlargement of the facilities for graduate study in the College of Pharmacy and the greater utilization of its resources by graduate students in other fields. With this mechanical difficulty eliminated, efforts toward coördination, particularly in the fields of chemistry, pharmacology, and bacteriology, will be resumed. One factor militating against our attracting students from other sections is the low tuition fees in the state universities. The majority of students are in the limited income group; therefore the higher costs of education and living in New York are serious obstacles. These conditions can only be overcome by offering better and more diversified facilities than are obtainable in their local institutions or by the establishment of scholarships for students of promise.

Many of the graduates of this College are engaged in manufacturing and other branches of the drug industries. In these positions the adequacy of their pharmaceutical training is acknowledged, but not infrequently the position demands that they have some familiarity with branches not ordinarily within the scope of pharmaceutical education. Herein lies an opportunity for educational work which can only be advantageously undertaken by an institution with established instruction in pharmacy, industrial chemistry, and certain phases of engineering. These facilities are available at Columbia. Information as to the needs of the pharmaceutical industry has been gathered. It is hoped that conferences with the proper officers may be arranged and that a concrete plan may be presented to the University Council in the coming year.

Respectfully submitted,

CHARLES W. BALLARD,

Dean

June 30, 1939

## SUMMER SESSION

### REPORT OF THE DIRECTOR

FOR THE SUMMER SESSION OF 1939

To the President of the University

Sir:

I have faithfully carried out the arrangements for the Summer Session of 1939 that I found made or contemplated when I took over the office on December 1, 1938. It has been a pleasure to share in an enterprise so well organized and to examine it quite open-mindedly for opportunities to improve the procedure. My first word here must be one of admiration for the work of my distinguished predecessor and his staff. If next year and thereafter I can accomplish any of the things that now appear worth considering, it is only because so much has already been done and a fine office tradition remains unbroken. The report which I now have the honor to submit as Director of the Summer Session follows the form of last year.

The fortieth Summer Session of the University opened July 5 and closed August 11, 1939; classes were held on the first and fourth Saturdays.

The report of the Registrar includes both the total registration for 1938 and an analysis of the registration for 1939 (see pages 418–21). The enrollment of 11,950 students as against 11,822 for 1938 showed an increase of 1.08 percent. The percentage of men and women was 30.19 and 69.81 respectively; the percentage of men was 29.10 in 1938. Of the students in attendance 62.95 percent had taken work at the University previously. The number of new students in attendance in the 1939 Summer Session decreased by 3.28 percent from the preceding year.

Every state in the Union was represented with 7,915 from outside of New York State, 96 from insular and noncontiguous territories, and 327 from forty-one foreign countries.

A total of 1,076 courses was offered, a decrease of forty-one from 1938.

The teaching staff included 727 instructors (454 men and 273 women) of which number 112 were assistants. There were, besides, twenty-three instructors in Union Theological Seminary. In the Summer Demonstra-

tion School there were thirty-eight elementary and high school teachers. There was a total of 277 instructors from outside the University.

DISTRIBUTION OF THE TEACHING STAFF BY ACADEMIC RANK

	Vis	siting	L	m . 1	
Rank	Men	Women	Men	Women	Total
Dean	3				3
Professorial Rank					
Full	35	8	72	10	125
Associate	7	3	41	II	62
Assistant	10	3	54	22	89
Instructor	75	64	97	100	336
Assistant	33	36	27	16	112
Total	163	114	291	159	727

An analysis of this table shows that in the Summer Session of 1939 there were 276 of professorial rank or 37.96 percent of the total number of those giving instruction.

There were four visiting instructors from abroad in 1939: Max Black, Lecturer and Tutor in Methods of Mathematics, Institute of Education, University of London, who lectured on the teaching of mathematics; Joseph A. Lauwerys, Lecturer and Tutor in Methods of Science, and Recognized Teacher of the University in Education, Institute of Education, University of London, who lectured on the teaching of natural sciences; Daniel Mornet, Professeur de littérature française, University of Paris, France, who lectured on French; and Florian Znaniecki, Professor of Sociology, University of Poznan, Poland, who lectured on sociology.

From Canada came Florence S. Dunlop, psychologist and supervisor of special classes in public schools, Ottawa, Canada, who lectured on education of the handicapped; E. Louise Rush, teacher of senior sight-saving class, Hester How School, Toronto, Canada, who lectured on education of the handicapped; and David Harris Russell, Assistant Professor of Education, University of Saskatchewan, Canada, who lectured on curriculum and teaching.

Furnald Hall was opened as a Residence Hall for women students.

An analysis of the Residence Hall figures gives the following summary: The average charge for men in Hartley Hall was \$5.22 per week, John Jay Hall \$6.10, and Livingston Hall \$5.17; for women in the Barnard College dormitories, Brooks Hall \$8.51 and Hewitt Hall \$8.48; in Furnald Hall \$7.21; in Johnson Hall \$9.45; in the Teachers College dormitories, Seth Low Hall \$5.70 and Whittier Hall \$6.23. Apartments in Grant and Sarasota Halls averaged \$14.76 and in Bancroft \$13.37 or \$17.04, depending upon the number of rooms.

In 1939 the French, German, Italian, and Spanish Residences continued socially and educationally a great success. The French House was under the direction of Mme Pierre Brodin; the German House, of Dr. Gertrud Günther; the Italian House, of Professor Maria Piccirilli; and the Spanish House, of Professor Carolina Marcial-Dorado.

The number of students coming to the Summer Session to take professional courses in writing increases yearly. The Writers Club completed its third successful season with a membership of 121, plus 127 single admissions. Four meetings were held for the discussion of various phases of professional writing.

The following exhibits were held on the Campus: Official Publishers' Exhibit of Text and Reference Books; Exhibition of Paintings and Sculpture by American Artists; and a Special Exhibition of Memorabilia of the Visit of Their Britannic Majesties to Columbia University on June 10, 1939.

During the summer the following institutes and conferences occurred: Institute of Accountancy; The English Institute; Inter-Division Educational Conferences; Conference on School Library Service; Conferences and Discussions on Current Questions in the Teaching of Mathematics; Utilization of Radio in the School; School Building Service Employees; Conferences and Discussions on Science and Science Teaching; also the World Congress on Education for Democracy.

The Juilliard School of Music gave eighteen concerts which were generously thrown open to students of the Summer Session. Organ recitals were held in the Cathedral of St. John the Divine, in Riverside Church, and in Corpus Christi Church. Other concerts were: two evenings with the Phil-Sym String Quartet, a harpsichord recital by Yella Pessl, and Orlando di Lasso's *Penitential Psalms* sung by our own Summer Session

Chapel Choir under the direction of Charles Henry Doersam. There were, in addition, two two-piano recitals, a violin and viola d'amore sonata recital, and an orchestral and choral concert by the training classes of Teachers College.

An informal outdoor Convocation was held in the Upper Quadrangle on July 7.

In all, 141 lectures were given on most varied subjects, and in addition numerous entertainments were held in the Graduate Room of Philosophy Hall and in McMillin Academic Theater, free to the students of the Summer Session.

The Summer Session classes in play production under the direction of Professor Milton Smith gave four performances of *The Alchemist* by Ben Jonson in the fifth week.

Excursions were conducted in and about New York City with a total of 5,594 participants, a gain of 13.53 percent over 1938. The West Point excursion included 861 students, and 182 visited the Washington Irving region.

The establishment of an information center in the lobby of McMillin Academic Theater seems to have met with general approval.

Respectfully submitted,

HARRY MORGAN AYRES,

Director

October 6, 1939

## UNIVERSITY EXTENSION

### REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

I have the honor and the privilege of presenting herewith the report of University Extension for the year ending June 30, 1939.

The record of the past year is very similar to that of other recent years, particularly since the part which University Extension fulfills in the University program has become more definitely and more clearly understood. Moreover, the past twelve months have strengthened the opinion in the educational world of the importance of adult education in general and have made clear the function it performs in higher institutions of learning and at Columbia University in particular. The various processes by which adult education becomes effective have been more fully developed through the agencies which have been organized for the purpose of extending its activities.

Columbia University has for nearly thirty years given much consideration to University Extension. Students who must rely for higher education upon that part of the University which is supplementary to the regular schools and courses of instruction have been given thoughtful interest on the part of the University authorities and now form an established group which represents the University's endeavor to provide democracy of opportunity for all who are qualified. Such students may select whatever they may need from a list of subjects and courses of wide range from the elementary to those of graduate character. With the aid of the departments the courses vary from year to year, although the essential and established subjects and courses are regularly and persistently offered. Hence the opportunity for selection is very large, and students may, by using the program of successive years, in the course of time obtain a satisfactory education of collegiate grade. Thus adult education holds a large place in the offering of the University.

In the passing of the years the different departments have from time to

time recognized the usefulness of University Extension in the expansion of their programs and in increasing the number and interest of their students. A clear illustration of this is shown in the newly aroused interest of the School of Engineering and its allied departments in University Extension. The Dean of the School of Engineering, Joseph W. Barker, and his assistant, Professor Lincoln T. Work, have given new life to Extension's courses in engineering. They have built up a well-defined program for workers in industry, providing especially for part-time graduate students using the University Extension system for this purpose. In fact, they have arranged for three types of courses: those undergraduate in standing, practical in their content, and generally not allowed to count for degrees; those offered through University Extension counting for the degree of Master of Science in engineering and, to some extent, for degrees under the Graduate Faculties; and finally, courses of regular standing in the Engineering School scheduled in the late afternoon and evening and on Saturday morning and announced in the circular of University Extension as open to these students. This is surely a comprehensive scheme for parttime students and is a most progressive step on the part of the Dean and Faculty of Engineering.

The past year has also witnessed the initiation of the program of study leading to the certificate of 120 points in accounting. This enables students through Extension courses to meet the educational requirements of the State Department of Education for admission to the examination for Certified Public Accountant in the State of New York. A number of students attending the course already possess a liberal arts degree so that it is evident that the certificate course is drawing students of high grade. This we might expect, as the course is excellent and calls for diligent and careful study.

Again, students come to University Classes of University Extension to prepare for admission to schools of medicine. They are either those who hope to enter upon medical study later in life or those who, having received their undergraduate degree, are changing their objective to medicine. The number of premedical students is smaller, but their intellectual and personal caliber is high. We have here an indication of the service rendered to the professional schools by University Extension.

We frequently hear the comment that our fees are high and beyond the

ability of students to pay. For this reason I have in these reports frequently called attention to the need of funds which would enable us to give grants-in-aid to many of our deserving students or to encourage others who desire to come. The University can assign only a small amount for this purpose, but there is a fine opportunity for real benevolence of a most satisfactory character. One large corporation subsidizes the efforts of its employees who desire to continue their education. Some years ago an important bank of this city began the custom of sending young men to us for courses of cultural value such as English and history. The result was so satisfactory that they are sending us this year fifteen students. It is gratifying to report that the system of fees has been unified so that there is a standard and normal fee for tuition and the same University fee for all students alike. This change will be greatly appreciated as it goes into effect this year.

In a recent report on student finances presented to President Butler by Dean Carl W. Ackerman it is shown that out of a cross section of university students in ten leading universities of the country only 7.4 percent approved of State or Federal Government aid to students in college. This independence of governmental assistance on the part of regular students is corroborated and confirmed by the spirit of many part-time students in University Extension who are compelled to support themselves while continuing their studies and do not look for outside assistance.

We have found it necessary to withdraw our organized branch of Home Study, which for a number of years was an active part of adult education of the nonresident type. This does not mean that we do not have confidence in this method of helping those who are unable to attend classroom instruction. It simply means that the University cannot maintain an elaborate and expensive system of nonresident study. We are, however, giving to a few selected students who need guidance an opportunity to attain their desires. These students use the same calendar and program and pay the same fee as resident students, and only subjects adapted to this method of guidance are presented. We hope to apply this system to reading courses as suggested, Mr. President, by you in your report of last year. The University therefore has at hand a method of adult education for nonresident students which it can use when the need of such aid is brought to its attention. Two courses were offered in the

Spring Session: one on the writing of magazine articles and one on short story writing. Ten students were given the opportunity for guidance study and completed their work at the close of the Spring Session with satisfaction to the instructor and to themselves.

The University Classes of University Extension assigned to afternoon, evening, and Saturday morning hours form the great educational service of University Extension. This year the resident enrollment was 7,974 with an extramural record of 2,400. Beyond this there were 550 enrollments in special classes. The students in University Classes are in large number attendant upon only one or two courses, and therefore their connection with the University is most tenuous. The University, recognizing this fact, has assigned special advisers for these students, so that they may be guided in the selection of their subjects of study. The advisers, understanding the situation fully, have established close personal relationship with their students and render most valuable service after a careful study of the many problems presented. It is our first endeavor to reach the individual student and thus arouse his interest in the University and counteract the effect of the slight connection which incidental enrollment in a single class must involve. The students in the past year, under the direction of the advisers, have organized the Association of University Classes, which has promoted appropriate extracurricular activities such as discussion groups, language groups, dinners, and informal parties. The personal approach is not merely through the advisory capacity but in simple social affairs which mean so much to students whose homes are at a distance. Mrs. Milton J. Davies, adviser to women students, has encouraged them to publish a little newssheet entitled The Reminder, the organ of the Association, which gives interesting details of a semisocial character and announces events of immediate student interest occurring in the University and in the city.

University Classes cover a large and complete University program of study of which English, business, languages, history, science, philosophy, and psychology have large bodies of students. English alone includes in its offering speech, business English, secretarial correspondence, English for foreigners, motion pictures, radio, drama, and a generous offering in composition, literature—English, American, and comparative—professional writing, and preparatory courses. This is a great department excellently administered, with able and distinguished instructors. The same is

true of the Department of Business, which has a carefully selected program of study, especially adapted to the type of students attending the afternoon and evening classes.

In our courses in architecture, landscape architecture, and drawing and painting we are fortunate in having the advice and devoted interest of Dean Arnaud and his associate, Professor Allen. I wish it were possible for me to speak in detail of the skillful educational service rendered University Classes by representatives of the various departments, particularly in the selection of instructors appropriate for this task.

The educational work to which I have been referring is conducted at Morningside Heights. I desire now to mention the extramural classes conducted at various centers wherever a need exists for certain educational work. We do not have any definite off-campus center with the possible exception of that at Newark, New Jersey, in the rooms of the Young Women's Christian Association. Approximately five hundred students, not including those of Teachers College, have registered during the academic year. The courses were given at ten centers located in nine cities of four different states, namely, New York, three cities; New Jersey, three cities; Connecticut, two cities; Pennsylvania, one city. The registration in these centers has been affected by the local adult education centers established in certain communities near the metropolitan district. These local community classes are administered and taught largely without compensation, and the tuition fees are extremely low. Our own classes are reduced to those who are interested in academic or professional training and some academic credit. It is questionable whether these general community classes will persist under the circumstances in which they are organized and administered, and the University should stand ready to help when other opportunities fail.

The Report of the Director of the Institute of Arts and Sciences, which is the lecture or lyceum division of University Extension, is given elsewhere. I refer to it here, nevertheless, so that I may call attention to the well-deserved promotion of Dr. Russell Potter to the position of Director of the Institute. Dr. Potter holds likewise the position of Director of the Division of Motion Picture Study.

For many years University Extension has supervised the educational work of the New York Chapter of the American Institute of Banking. This organization supplies appropriate education for bank employees of

the city. University Extension through an important member of the staff of the University, at the present time Professor R. S. Alexander of the School of Business, serves as educational adviser. Members of the Institute enjoy the educational advantages supplied by the Chapter. Individual students numbered this year 3,162, and the number of class enrollments was 7,567. This work unselfishly administered by the young bankers of New York is one of the fine educational services of New York City in which University Extension is glad to coöperate.

The Greater New York Federation of Churches, which cares for the general undenominational interests of the city, has for a number of years conducted a department of religious education, and its purpose has been principally the training of religious teachers for the church schools of the city. University Extension has coöperated with this activity and has aided in many ways in training prospective teachers. The total number of students was 1,851 in 1937–38, and last year there were 1,911.

University Extension has felt the importance of recent developments in our modern life—the moving picture and the radio—as bearing upon the educational work assigned to it. We have, therefore, offered a course in fine arts entitled "The Motion Picture," discussing the development, technique, and appreciation of the motion picture, under the leadership of Mr. John E. Abbott, of the Museum of Modern Art. The course is being given in the new building, 11 West 53 Street, through the courtesy of the Museum. It is conducted on the highest plane, and only students specially qualified have been admitted. We also offer courses on the subject of the radio under the Department of English.

The question as to whether broadcasting should form part of the service of University Extension in the same manner as the Institute of Arts and Sciences and Film Study is interesting. There seems little doubt of the service which the University might render either with its own equipment, if that could be provided and maintained, or better through one of the broadcasting companies. The report of a committee of the University at present making a careful study of this problem is awaited.

Respectfully submitted,

James C. Egbert, Director

# INSTITUTE OF ARTS AND SCIENCES

#### REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the Director of University Extension

SIR:

I have the honor to submit herewith the twenty-sixth annual report of the director of the Institute of Arts and Sciences, covering the varied activities of this branch of the larger University for the academic year 1938–39.

The Institute season opened on Monday, October 17, with an address by President Nicholas Murray Butler on the subject "Wait and See." It closed with a recital by Walter Gieseking, distinguished pianist, on Saturday evening, April 1. The attendance at the first meeting was 802; at the last, 1,159. During the year individual members numbered 1,749; the total of all events offered was 208; the total attendance at all Institute events was 62,040; the average attendance at all regular program events was 473.

The program that was offered brought to the University a great many men and women who have achieved distinction in the fields of journalism, belles lettres, science, and philosophy. Mention may be made here of only a few: John Gunther, Sir Richard Gregory, Edna St. Vincent Millay, Robert Frost, Thomas Mann, Louis Bromfield, Professor E. A. Hooton, Sir Alfred Zimmern, Phyllis Bottome, Countess Judith of Listowel, Pearl Buck, Waldemar Kaempffert, Hon. Jan Masaryk, Commander Donald B. Macmillan. The music program that was offered brought such artists as Yehudi Menuhin, Nino Martini, Walter Gieseking, Vronsky and Babin, Alfred Dubois and Marcel Maas, Soo Yong, and the Wagnerian Festival Singers. In the field of the dance the Institute presented Trudi Schoop and her Dancing Comedians, Martha Graham and her Concert Group, Lotte Goslar, and Angna Enters. Members of University faculties who appeared on the Institute program are Nicholas Murray Butler, Robert Lynd, Walter Rautenstrauch, Albert C. Jacobs, Houston Peterson, Clyde Miller, and Arvid Broderson.

Special mention should be made of the series of Twelve Historical

Piano Recitals given by Gunnar Johansen, in coöperation with the Department of Music (Tuesday and Thursday afternoons, average attendance 396); of the series of six illustrated lectures on "This Art Season in New York," given by Walter Pach (Wednesday nights, in competition with another Institute event and a motion picture showing by the Division of Motion Picture Study); of "The Road to Nowadays," a historical series by Lewis Browne (ten discussions, Wednesday evenings in Horace Mann auditorium, average attendance 415).

In my last report I suggested that the quarter-century mark was a time to take stock. I offered a very brief outline of the development of the Institute since its establishment in February, 1913. Now I wish to call to your attention a situation with which we are confronted and which we must face realistically if we are to solve the problems involved in any satisfactory way.

The situation is simply this: we are facing a steady decline in membership registration and in audience attendance. In the past five years, to go no further back, we have dropped as indicated below:

Years	Members	Attendance
1934-35	2,585	82,498
1935-36	1,954	72,008
1936-37	1,914	67,685
1937-38	1,955	65,135
1938-39	1,749	62,040

Other organizations similar to our Institute are experiencing the same trends. In her last report as Acting Director of the Brooklyn Institute, for example, Miss Irene Miles wrote: "Despite spasmodic, artificially stimulated campaigns for membership in the past, our membership income keeps decreasing." And the director of a large public forum in the Mid-West told me, informally, that unless conditions changed he did not believe his organization could continue in existence. Groups that are forging ahead, or at least holding their own, are those that are adapting themselves to changing conditions and rapidly evolving interests. Thus, the League for Political Education, Inc., which has been functioning for more than forty years, appears in a new dress (slightly streamlined in design) as the Town Hall, Inc.

Even a summary study of the changing conditions that vitally affect the

nation's patterns of mental and cultural living indicates at once that in 1913 (the year the Institute was established) there were no radio, no movies (only the "flickers" and the "nickelodeon"), no Foreign Policy Association, no League of Women Voters, no WPA discussion groups and forums. In 1939 the forensic landscape is littered with such organizations.

Here in this University community the factors making for this change may be listed as follows:

- r. Radio. During the past three years programs of very high educational and cultural nature have won wide followings. Mention may be made of "America's Town Meeting of the Air," the University of Chicago's "Sunday Round Table," Professor Lyman Bryson's "The People's Platform," and in particular the very excellent work being done by the Experimental Workshop of the Columbia Broadcasting System.
- 2. Motion Pictures. When Hollywood made up its mind to take over the travelogue business, it signed the death sentence of hundreds of platform Marco Polos who had had their heyday in the prosperous times of the American lyceum and Chautauqua era. Hollywood travelogues are far from perfection (except photographically and technically, and in these respects they are often superb), but the day of the returned traveler who illustrated his remarks with stereopticon slides and a few reels of very fuzzy motion pictures is, thank the gods of Demosthenes, done.

In other respects, the motion picture industry has been awakening to new opportunities. There are, to mention a few examples, the Technicolor historical shorts of Warner Brothers, the "Crime Does Not Pay" series of Metro-Goldwyn-Mayer, and the new travel series "World Windows" now in production at United Artists. Celluloid tripe and Hollywood drivel, of course, continue with us, unfortunately; but the industry has given us in recent years such superb productions as the series of biographical studies by Paul Muni (Pasteur, Zola, Juarez), The Good Earth, The Informer, Mr. Deeds Goes to Town, Pygmalion, Edge of the World, Grand Illusion, and Snow White and the Seven Dwarfs.

3. The development of other lecture courses, open forums, discussion groups, etc. In 1913 our Institute was almost unique in Manhattan; today we are forced to compete with programs of great variety and interest at the Riverside Church, Dr. Holmes's Community Church on 110th Street,

meetings of the Foreign Policy Association and similar organizations, lectures at the New School for Social Research, at the Rand School, at the Discussion Guild, at the Talk-of-the-Town Club, etc.

4. The establishment and successful conduct of composite courses within University Extension itself. I refer to such courses as "Contemporary Literature and Contemporary Writers," "The Culture of France," and "Clashing Concepts in Contemporary American Thought."

The Institute was established, it should be remembered, on the American lyceum plan, and its program was planned as a general catchall and cultural grab bag. During its days of greatest usefulness the lyceum brought to culturally starved communities a varied program of lectures, music recitals, dramatic offerings, and novelty entertainments. It flourished in the days before Mr. and Mrs. Average Man could turn the dial of a radio and hear the voice of H. V. Kaltenborn broadcasting from a battlefield in Spain, the music of a great symphony orchestra under the direction of the world's greatest maestro (last winter 10,000,000 American people stayed at home on Saturday nights to listen to the Toscanini concerts!), or the exciting lines of Archibald MacLeish's "Fall of the City" as it was dramatized by the Columbia Workshop.

True enough, Mr. and Mrs. Average Man have to select carefully from the great stream of vulgar banality the really fine things that the radio is bringing them. But the point is that Mr. and Mrs. Average Man are learning to pick and choose in radio, in movies, in the lecture field. And one may well ask, indeed, why should they go to an ordinary concert when they can stay at home and have Toscanini?

Studying this situation very carefully during the past few years, I have come to the conclusion that the day of lyceum entertainment is definitely done. Once it filled a need; our people were refreshed, recreated, and entertained by dramatic monologues, by fragmentary presentations of Shakespearean plays, by "intimate" operas and "scenes from great operas," and the like. Today that need is, to a very large extent, being met in other ways.

Furthermore, the Institute program has always been largely a lecturediscussion program. During the nine years that I have been here, we have offered lectures and discussions on five nights of the week, reserving the sixth night for entertainment numbers. This sixth night has always been a heavy drag on our budget, and has naturally tended to force us into competition with the thousand and one other attractions that a city like New York can offer.

Under these circumstances the canny thing to do, it would seem, is to discontinue the entertainment events on the regular program and to concentrate our efforts and the resources of our budget on the lectures and discussions. This we shall do, continuing on Saturday nights only the Institute Concert Series and the Institute Dance Series. Only by doing this, I think, can the public lecture be kept alive as an American institution. And those of us interested in popular education must not stand by and see the entertainment part of any program carry along with it to extinction the lecture and discussion part (which, it may be recalled, is what happened in the related fields of the lyceum and the Chautauqua).

 $\hat{I}$  have said much above about the competition which we face from the radio and the movies. I do not wish to give the impression that I consider the future of the lecture platform a gloomy one. Far from that, for I most heartily believe that the radio and the movies will never supplant the lecture platform, the concert hall, the theater. What I am saying is that we must recognize these new tools of mass entertainment, propaganda, and instruction; and most emphatically I repeat what I have said many times before: We should be using them, but we should not undertake their use until we realize frankly and intelligently that each has its own technique and its own methods. A classroom lecture, or a graduate seminar, for example, cannot be broadcast with any satisfactory results whatever; the same is true of a public platform lecture. But all of these can be adapted to the technique of radio presentation. And it is my opinion that the University, through University Extension, should be playing a leading role in the development of these two great educational devices that are so new and yet so characteristic of our time—the radio and the movies.

Respectfully submitted,

Russell Potter,
Director of the Institute

June 30, 1939

# DIVISION OF MOTION PICTURE STUDY

#### REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the Director of University Extension

Sir:

I have the honor to present herewith my second annual report as Director of the Division of Motion Picture Study, covering the activities of this important new branch of University Extension during the academic year just closed, making certain recommendations for advancing the work of the Division in the immediate future, and offering certain well-considered observations on the movies as a social and educational force in our democracy.

The two courses established in the fall of 1937 were again carried through with varying degrees of success: the Tuesday evening course, limited to thirty students, given at the Film Library of the Museum of Modern Art under the direct supervision of Mr. John Abbott, director of the Library, and Miss Iris Barry, curator; and the Wednesday evening series, given in McMillin Academic Theater for a larger and more popular audience. Registration in the former was twenty-six and twenty-three for the two terms; in the latter, 109.

These two courses brought before University Extension students such speakers from the industry as Alfred Hitchcock, well-known English director; King Vidor, American director; Norman Alley, ace of American news-cameramen; Soo Yong, talented Chinese-American actress; Paul Green, dramatist and script writer; Hal Hode, executive with Columbia Pictures; Joris Ivens, maker of outstanding documentary films (Spanish Earth, Rain, The 400,000,000); Vicki Baum, author of Grand Hotel and Tale of Bali; Gilbert Seldes, critic; Wilfrid Walter, English actor; and many others.

Plans for continuing these two courses next year have been approved. The course at the Film Library will continue with only minor changes in schedule and content. The McMillin course will be very much altered. We shall offer only ten meetings, instead of the full twenty, showing ten

great films from 1915 to 1935 and discontinuing, for the present at least, the discussion. The films which we shall undertake to show have been selected by an informal panel composed of King Vidor, director; Spencer Tracy, actor; Paul Muni, actor; Bette Davis, actress; Wilton A. Barrett, executive director of the National Board of Review; Iris Barry, curator of the Film Library of the Museum of Modern Art; William James Fadiman, story editor for M-G-M; Frank Nugent, motion picture critic for the New York *Times*; Terry Ramsaye, editor of the *Motion Picture Herald*; Jacob Wilk, story editor for Warner Brothers; Gilbert Seldes, critic; Hal Hode, a member of the executive staff of Columbia Pictures; and James Shelley Hamilton, chief of the review section of the National Board of Motion Picture Review.

The pictures selected by this group, and the votes that each received in the informal poll conducted this spring, are as follows:

	,	Number of
Film	Production	Votes
The Birth of a Nation	1915	12
The Big Parade	1926	9
The Cabinet of Dr. Caligari	1919	8
The Kid	1920	8
Nanook of the North	1922	7
It Happened One Night	1934	7
The Informer	1935	7
The Gold Rush	1925	6
Potemkin	1926	6
Anna Christie	1931	6

It should be pointed out that this list of ten does not purport to be "the ten best" pictures of this double decade, nor does it represent any unanimity of opinion on the part of those who were good enough to send in their votes. One person, for example, objected with good-natured violence to the inclusion of Robert Flaherty's Nanook of the North, calling it "nothing more than a tricked up travelogue, outrageous in the mis-information it contained regarding the life of the Eskimo. . . ." And another, very close to the industry, gave votes to the 1932 Million Dollar Legs and the 1924 The Man Who Knew Too Much. It is of some significance, however, that of the forty-eight films that were voted on by these thirteen film-wise persons, ten drew compelling majorities.

Negotiations have already been begun for securing these films, and it is to be hoped that prints of all of them will be made available to us for screening. Indeed, the availability of only two of them, the two Chaplin films, is in question. Mr. Chaplin personally controls the prints of all his feature pictures, and to date he has consistently refused to make available for revival or for special screening any which have been retired.

During the past year in the University community interest in the movies as an educational tool and as an entertainment and cultural force has grown apace. Professor James T. Shotwell has continued active in the field, and this spring he spent several weeks in Hollywood supervising the production of a feature-length picture designed to show the history of America and of the movies, under the direction of Cecil B. DeMille. Mr. Duncan Emrich, of the Department of English, has secured approval for a course on the history and aesthetics of the motion picture, which will be given in Columbia College next year. Columbia University Press, following a suggestion that originated with this Division, is considering the establishment of a film rental library. There is also considerable discussion of the feasibility of publishing a motion picture quarterly, in the pages of which would appear serious articles on various historical, aesthetic, and social aspects of the movies. A meeting, called in April by Mr. Emrich, was attended by representatives from Yale University, Princeton University, Brown University, the New York Public Library, the Film Library of the Museum of Modern Art, the Department of English of Columbia College, and the Division of Motion Picture Study of this University. No action of any sort was taken at the meeting. Indeed, any positive result was balked by the fact that no one seemed to know how the proposed journal was to be financed and by the additional fact that there seemed to be no unanimity whatever on the question of just what kind of journal is wanted.

The Division of Motion Picture Study will continue to coöperate as actively as possible with all these various persons and agencies, even though it does not approve all the details of their plans and projects.

The Division plans to continue, more actively than in the past, its campaign for a free screen in America, a goal to be achieved only by the abolition of all political boards of censorship and by convincing the producers that some pictures must be made on the adult level. It is only thus

that the movies can ever become adult entertainment in the full sense of the word. Technically, the movies have grown up; but censorship and pre-censorship keep them in diapers. The brains, the talent and ability, the technical resources for giving us motion pictures that would challenge the mind and stir the emotions of adult audiences the country over are in Hollywood; but they are used up cutting out paper dolls and making saccharine celluloid stews. For some of this, the Hollywood setup may be blamed, of course; but not for all. Hollywood has the censor-jitters. First there is the big hurdle of the Code, administered by the Breen office, where producers are told in advance what they must not do and say in their pictures if those pictures are to receive the stamp of approval of the Motion Picture Producers and Distributors of America. Then there are the various official state boards of censorship to pass. And finally there are several highly organized pressure groups which must be pleased -the Catholic Legion for Decency, the D.A.R., the east-coast and westcoast preview committees of the General Federation of Women's Clubs, the Council of Federated Church Women, the National Society of New England Women, and many others.

The administration of the Production Code is an industry matter and as such is one that must be controlled by the industry itself. The question of state and regional censor boards, however, is another matter, and one upon which every citizen may speak his mind openly and with the full assurance that he has every right to speak. The Division of Motion Picture Study is definitely opposed to any form of political censorship of the motion pictures because it firmly believes that such control is (a) un-American; (b) inevitably and wholly stupid in its administration; and (c) an unfair hidden tax on the producer, the exhibitor, and the public.

In the past we have devoted at least one meeting each year to this question of censorship, showing films that had come under the ban of the New York censor, such as *Spring Shower*, a Hungarian film, through the courtesy of Mr. Irving Shapiro, of World Pictures; *Remous*, a French film, through the courtesy of Mr. Arthur Mayer, of the firm of Mayer and Burstin; and, this past year, the widely discussed *The Puritan*, through the courtesy of Mr. Jean Lenauer, of Lenauer International Films. And when the state censor put the ban on *Yes*, *My Darling Daughter* we immediately offered our screen to Warner Brothers for the picture. In every

case, it was the general opinion of the groups viewing these pictures that not one of them could be rated as "obscene, indecent, immoral, inhuman, sacrilegious," or which could be considered "of such a character that its exhibition would tend to corrupt morals or incite to crime."

Believing as we do in a free screen, and wishing to further in every way possible the development of the motion picture as a social art, the Division will continue to oppose political censorship of every kind and to seek to have abolished in its entirety the New York State board of censors (the Motion Picture Division of the State Department of Education).

Looking toward the future development of the Division of Motion Picture Study, may I make again those recommendations which I submitted to you last year, and urge serious consideration of the following suggestions for the establishment of a Motion Picture Workshop in University Extension, under the direct supervision of the Division of Motion Picture Study. The Workshop should offer the properly qualified student sound training, authentic and carefully integrated, in the various arts and techniques that now serve the motion picture. This training should be designed to qualify him for a position within the industry itself or for training others.

Within the next quarter of a century there is going to be an increasing demand for teachers properly qualified to teach the motion picture in high schools and colleges. The great university which first establishes such a workshop as that outlined here will render a unique service in the educational world.

To be effective, such a workshop must not be casually organized; it must not be merely a collection of more or less related courses. It must be, from the ground up, carefully articulated and shrewdly integrated. It must have an administrative officer whose academic qualifications are beyond question and who is equally at home in the world of practical affairs; a person of wide interests and well-distributed information; a person of considerable film sense, of great enthusiasm for the film, of daring. Its staff must be composed of talented independent individuals who have learned one of the great lessons of movie-making: coöperation.

For all students in the Workshop three general courses would be basic. Let us call them:

Motion Picture Arts 1—History and development of the motion picture. Richly illustrated throughout with showings of films from the past (domestic

and foreign) and with lectures and required reading. Some attention would be given to changing theories and aesthetics of the motion picture, but the

emphasis would be on the facts.

Motion Picture Arts 2—Present-day methods, techniques, and organization. This would be illustrated throughout with pictures, demonstrations, and visits to studios and laboratories. It would consider the technical devices placed at the service of the producer by the inventor and engineer. It would aim to familiarize the student with the basic nature of the motion picture today, enabling him to realize, vividly, what can be done (at present) in pictures. It would consider also such matters as the corporate structure of the industry, methods of distribution and control, certain problems of financing, etc.

Both of these courses should be simple and direct and full of meat. It may be noted that in neither is there any suggestion of talk about "the film as a record of contemporary life" or "the social significance of the motion pictures." In this department, we can take all that talk for granted and settle right down to work to find out, in a general way, what the motion pictures are, how did they get that way, and what makes them that way.

Motion Picture Arts 3—Production. In this course the group would be organized into a studio producing unit. Working under actual studio conditions (and within actual studio limitations) the group would produce a short film, under expert direction and supervision. Work would be done on a prepared script carefully designed to illustrate as many studio problems as possible.

These three courses, if intensively followed through, would give the student a good working knowledge of the motion picture arts. A student completing them should be prepared to go into a high school or college to organize and conduct similar courses. Or he should be in a position to begin, in some modest position, his work in the commercial studios. (And, be it noted, if his aim is a Hollywood studio, he should be encouraged from the beginning in a hearty belief that completion of these three courses will not turn him into a Frank Capra overnight!)

But there should be other courses, more specialized than the above, courses in scenario writing, acting, direction, lighting, sound, costuming, cutting and montage, camera, etc. These should all be practical laboratory courses, leading in every case to production. Thus the student interested in scenario writing would have the chance to work out his ideas in the midst of a group of like minds. Every so often a script from the class in scenario writing would be chosen for production. It would be produced

and directed by other students; photographed by students; cut and edited by students.

At all stages in the production the various interested groups would be working carefully together. Thus the author of the scenario might have a role as actor in his own play. Or he would work very closely with the director, and later in the cutting-room. A girl interested in acting would be given opportunity to follow up her second interest, costuming. A brilliant young student in the Department of Physics might come in to do some experimental work in practical sound; a young electrical engineer would come in, interested in problems of lighting. The spirit of this Motion Picture Workshop should be that of the atelier.

The motion picture, in any of its various branches, cannot be taught as a studio course in academic painting is taught, as a course in Greek or one in mathematics is taught. Those are dead, static things. They are fixed, and it is easy to dogmatize about them. But the movies are the most exciting and the most lively of all contemporary art forms, the only art which perfectly expresses the age of the machine, and the art which today has the greatest social significance of them all. The movies must be taught in an experimental way (if, indeed, all great teaching is not done in just that way).

And this leads me to point out a service of great value—and one that is absolutely unique—that such a Motion Picture Workshop would render. It would serve as an experiment station. Let us have here advanced students working on interesting problems of technique and presentation. After all, the motion picture was "discovered" that way! Hollywood is afraid of experimentation, generally speaking, because of the money involved, uncertainty of the reaction of the public, etc. But here in the Workshop we would have no public, except ourselves and the knowing ones in the industry who would be keeping their eyes fixed on us to see what might pop up that could be used.

The Workshop, if properly organized, would furnish the University with a valuable production service. Here would be made, in coöperation with interested individuals and departments, instructional films, pictures to be used in connection with the work of the Alumni Association, newsreels of athletic events of all kinds and of campus activities, pictorial records of important University occasions. Such a production unit is already functioning successfully at Western Reserve University.

The Workshop would strive in every way possible to further the formation of amateur cinema clubs in high schools and communities, furnishing technical advice and, wherever desirable and possible, supplying direct guidance. It is even possible that it would coöperate with various agencies in the state, cultural and governmental, in making documentary pictures showing the resources of the state and the activities of its people.

All of the above represents no very great financial outlay. There should be, of course, adequate office and classroom space available. There should be a sound-proof projection room and a sound-proof studio. These can be established at no great expense, provided the space is available. The equipment need not be elaborate or expensive. It should be simple but, of course, adequate. After all, one need not practice every day on a Stradivarius in order to learn to become a great concert violinist; and one does not need a ten-million-dollar Hollywood studio in order to learn to make motion pictures.

And now in conclusion, Mr. Director, may I quote from a letter which I wrote to President Butler on March 25 of this year: "It would seem that the time has come when, in this new and highly important field, the University should be prepared to advance, boldly assuming the leadership which properly belongs to it, or it should prepare to retire as gracefully and as unobtrusively as possible."

Respectfully submitted,

Russell Potter, Director,
Division of Motion Picture Study

June 30, 1939

### SCHOOL OF BUSINESS

#### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

I have the honor to present herewith the report of the School of Business for the academic year ending June 30, 1939.

In critical, chaotic times such as now confront us, records of modest recent achievement are dwarfed in perspective. One is tempted to ignore them and keep silence. But luckily, in terms of past experience, we know that this lapse in relative interest is transient and that in the longer run events and accomplishments that seem small and pale in contrast with current lurid, tempestuous, and massive happenings fall into their proper setting as parts of normal living and doing. The records of medieval papal revenues must have seemed of very minor import in the turmoil of the Thirty Years' War; but centuries later these records have become a treasure-trove for the historical scholar and a mine of informative data to students of relativities in human experience.

In this thought and spirit we are here able to itemize workaday happenings in their quiet setting of academic routine and to forget, for the moment, the excitements of a world too largely devoted to the obliteration of values antithetical to waste and destruction.

The record of the past year is one of quiet activity and growth. We have served a larger student body than in any previous academic year. We have, in fact, reached our limit in student numbers and must further extend the practice of recent years of limiting enrollment only to those applicants best qualified for admission to the School. This applies particularly to our accounting course, public interest in which has grown markedly during the past year. Our standards of academic performance are distinctly more rigorous than they were a decade ago; yet student records have improved quite as distinctly, a convincing indication of the efficiency of the Office of University Admissions in applying faculty standards as well as of the growing acquaintance of the members of our staff with their educational problem.

All of the members of our teaching staff have engaged in complementary activities, some of which warrant fuller reference.

Professor B. Haggott Beckhart continued his work in economic research for the Chase National Bank and has recently undertaken a reorganization of the bank's research facilities.

Mr. Rollin F. Bennett read two papers at the Christmas meeting of the American Economic Association on "The Risk Factor in Capital Formation" and on "The Use of Mixed Difference and Differential Equations" in business cycle analysis. He reviewed Macaulay's Interest Rates, Bond Yields and Stock Prices in the American Economic Review, and represented the University at a conference on Foreign Trade and the American Economy under the auspices of the Council on Foreign Relations.

Professor Ralph H. Blanchard published two articles on insurance in the *Journal of American Insurance*; delivered a series of addresses before the annual convention of the National Association of Mutual Insurance Companies, at the annual meeting of the Connecticut Association of Insurance Agents, at the annual dinner of the Institute of Traffic Engineers, and before the Insurance Accountants Association; served on the General Educational Committee of the Insurance Society of New York, as well as on their special committee in charge of life insurance; and acted as chairman of the panel discussion at the annual insurance conference of the American Management Association. He has been elected vice-president in charge of their insurance division for the year 1939–40. He also represented the University at the annual conference of the Chartered Insurance Institute in London, England.

Professor James C. Bonbright published an article, "Public Ownership and National Power Policy," in *The Yale Review*, served as consultant to the Tennessee Valley Authority on allocation of joint costs of its multiple-purpose dams, continued his activities with the Power Authority of the State of New York, as its chairman, and acted as chairman of the committee on appraisal of the Columbia University Council for Research in the Social Sciences. In this last capacity he carried through a very difficult task of research with rare discrimination and dispassionate judgment. For his book on *Valuation of Property*, published in 1937, he was awarded the Ames Prize "awarded about every four years by the Faculty

of the Harvard Law School for the most meritorious book or article on some legal subject."

Professor Thomas W. Byrnes published an article on "Opportunities in Accounting" in the *Accounting Forum* and addressed the annual convention of the American Accounting Association in Detroit on "Auditing Instruction by the Laboratory Method," later reported in the spring issue of *The Accounting Review*.

Professor John M. Chapman was engaged in research at the National Bureau of Economic Research on the relationship of commercial banks to consumer installment financing, a project carried on by the Bureau for the Association of Reserve City Bankers. He has also served as economic adviser to the Bank of America.

Professor James L. Dohr has continued to act as co-receiver of the New York, Boston and Westchester Railway Company, and has served, as well, as a member of the Terminology Committee of the American Institute of Accountants.

Dr. Eli Ginzberg published through Harper and Brothers a book on *The Illusion of Economic Stability*, contributed a series of review articles to the *Saturday Review of Literature* and to the *Menorah Journal*, published an essay on "Economics in Transition" in the *Journal of Social Philosophy*, acted as reader on economics for the Book-of-the-Month Club and as consultant on economic problems of Jews in the United States to the Conference on Jewish Relations.

Mr. Benjamin Graham published an article on "Fair Reorganization Plans under Chapter X of the Chandler Act" in the *Brooklyn Law Review*, and has been active as expert witness for the United States Government and for the State of New Jersey in a number of tax cases.

Professor Robert M. Haig assisted in the preparation of the executive budget of the State of New York, acted as consultant for the Central Statistical Board of the Government of the United States, and served as chairman of the committee of the National Tax Association on the Federal Taxation of Corporations.

Professor Roy B. Kester delivered a series of lectures in the Middle West before chapters of the National Association of Cost Accountants, served as chairman of the education committee of the American Institute of Accountants and as a member of their Committee on Accounting Pro-

cedure. He also acted as chairman of the Committee on Consolidations and Reorganizations of the New York State Society of Certified Public Accountants and as a member of the education committee of the Controllers' Institute.

Professor Hastings Lyon published through D. C. Heath and Company a 900-page work on *Corporations and Their Financing*, a book since adopted for instructional purposes by many colleges and schools of engineering.

Professor Frederick C. Mills published a completely revised edition of his widely used *Statistical Methods*, continued to serve as chairman of the Committee on Price Research, and as a member of the research staff of the National Bureau of Economic Research; and engaged actively as a member of the Committee on Social Science Personnel of the Social Science Research Council and as a member of the Committee on Short Selling of the Twentieth Century Fund.

Professor O. S. Morgan has spent an active year in travel and study connected with his Latin-American interests and has coöperated in the working out of agricultural and rehabilitation programs in our insular Caribbean areas. He also served as a member of the Agricultural Committee of the Resettlement Division of the National Coördinating Committee to work on plans and procedures looking toward the solution of Jewish refugee problems. He has submitted to the committee a memorandum on "Farm Types and Types of Jewish Refugee Farmers."

Professor John E. Orchard has spent the academic year in Asia with particular interest in studies of the progress of industrialization in India and China—work of some years' duration pursued under the auspices of the Columbia University Council for Research in the Social Sciences.

Dr. Harlow S. Person has devoted the major portion of his effort during the year to the carrying out of heavy responsibilities as consulting economist of the Rural Electrification Administration of the Government of the United States.

Mr. George B. Roberts has given his major effort to the National City Bank of New York as vice-president in charge of their widely and favorably known "Monthly Letter on Business Conditions."

Professor Ralph W. Robey has written during the past year a weekly interpretative article on business and finance for *Newsweek*.

Professor Carl Shoup published an article in the *Annals of the American Academy of Political and Social Science* on "Taxing for Social Security," served as part-time consultant to the Treasury Department of the Government of the United States, assisted Professor Haig in his work on the executive budget of the State of New York, and collaborated with Professor Roswell Magill in preparing a report on the revenue system of Cuba, about to be published.

Professor J. Russell Smith pursued geographic field work in south-western areas of the United States and in northern Mexico, and gave some time to a study of self-help enterprises of the unemployed, with resulting written material about to appear in print.

Professor Thurman W. Van Metre published a revised edition of his *Trains, Tracks and Travel* as well as a general work on *Transportation* in the United States.

Mr. Joseph L. Weiner has been actively engaged as special counsel to the Reorganization Division of the Securities and Exchange Commission of the Government of the United States.

Under the supervision and guidance of Mr. George B. Roberts the banking seminar conducted a series of lectures and discussions which commanded wide attention and interest in financial circles. A list of speakers with topics follows:

Speaker	Topic
Mr. Shepard Morgan, vice-president, Chase National Bank	Deficit Financing in Germany
Mr. Roger Steffen, vice-president, National City Bank	Modern Personal Credit
Mr. William Howard Schubart, vice- president, Bank of Manhattan Com- pany	Modern Problems in International Exchange
Mr. Adrian Massie, vice-president, New York Trust Company	Investing for a Commercial Bank
Professor Carl Shoup, Columbia University	Fiscal Aspects of Old Age Reserves
Professor Frank Graham, Princeton University	One Hundred Per Cent Reserves and the Control of the Medium of Ex- change

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Speaker	, Topic
Mr. Daniel W. Bell, Acting Director of the United States Bureau of the Budget	Functions of the Bureau of the Budget
Dr. E. A. Goldenweiser, Director of Research and Statistics, Board of Gov- ernors, Federal Reserve System	The Federal Reserve System Today
Dr. Michael Heilperin, Assistant Professor, Graduate Institute of International Studies	Fixed Parities vs. Fluctuating Exchange Rates as Objectives of Monetary Policy
Dr. Otto Rosenberg, former secretary, Austrian Bankers Association	Vienna as a Financial Center
Professor F. Cyril James, University of Pennsylvania	Aspects of the Chicago Money Market
Mr. L. R. Rounds, vice-president, Federal Reserve Bank of New York	Industrial Loans and Federal Reserve Banks
Dr. Otto Nathan, New York University	Business Cycle Theory and Public Spending
Mr. Donald S. Thompson, chief, Division of Research and Statistics, Federal Deposit Insurance Corporation	Deposit Insurance and Bank Supervision
Mr. William McC. Martin, Jr., president, New York Stock Exchange	The New York Stock Exchange
Mr. Amos E. Taylor, assistant chief, Finance Division, Bureau of Foreign and Domestic Commerce	The Balance of Payments Items
Mr. Horace L. Sanford, manager, Research Department, and assistant secretary, Federal Reserve Bank of New York	The New York Money Market
Mr. George L. Bliss, president, Federal	The Operations of the Federal Home

Mr. Benjamin Graham, Columbia University

Home Loan Bank of New York

Storage and Stability — A Plan for Monetizing the Commodity Surplus

Loan Bank System and Its Related

Agencies

Speaker

Topic

Professor William Adams Brown, Brown University The Probable Future of Gold

Mr. W. D. Whittemore, vice-president, Export-Import Bank, Washington, D. C.

Work of the Export-Import Bank

The accounting seminar profited by the contribution of outside speakers as follows:

Speaker

Topic

Mr. Robert D. Gracey, Price, Waterhouse & Co.

Internal Check

Dr. Henry W. Sweeney, Farm Credit Administration Stabilized Accounting

Mr. Charles Hecht, C.P.A.

Management through Accounts for the Business

Student registration was twenty-eight greater than during the academic year 1937–38. Registrants for the Bachelor's degree declined in number from 234 to 224; for the Master's degree, increased from 224 to 235; and for the degree of Doctor of Philosophy, increased from seventeen to forty. The number of special or unclassified students increased from sixty-six to sixty-nine. The number of students from Columbia College taking courses in the School of Business fell from 232 to 167.

Residence dispersion of students showed its usual wide range. During the current academic year 65 percent were residents of New York State as against 68 percent during the academic year 1937–38. In terms of previous college affiliation, 188 came from other divisions of Columbia University. Their distribution for the past three academic years has been as follows:

Academic Year	Bard College	Barnard College	Columbia College	School of Engineering	University Extension	Graduate Faculties	Seth Low Junior College	T cachers College	Total
1936-37		16	132		30	2	6	3	189
1937-38	1	10	121	I	<b>2</b> 6	6	14	I	180
1938-39	3	10	131		30	3	II		188

From outside institutions, thirty-one students came from the College of the City of New York; nineteen from New York University; fourteenfrom Fordham University; thirteen each from Hunter College and Yale University; eleven from Princeton University; nine from Harvard University; seven each from Dartmouth College and Manhattan College; six each from the University of California, Notre Dame University, and Union College; five each from Cornell University, Lehigh University, the University of Pennsylvania, Rutgers University, and the University of Texas; four each from Brooklyn College, the University of Michigan, St. Joseph's College (Brooklyn), St. Peter's College (N. J.), Washington University (Mo.), Williams College, the University of Wisconsin, and Roberts College (Turkey). Three or less came from each of 122 other institutions in this and foreign countries, including thirty-six students from seventeen institutions in Austria, Canada, China, Denmark, England, Germany, Hawaii, Holland, Iceland, Ireland, Italy, Norway, Sweden, Switzerland, Syria, Turkey, and Yugoslavia.

The Faculty Committee on Employment, through its secretary, Anna D. Hynd, presents a report of activities for 1938–39 which brings out a story of placement difficulties since yielding under the impact of vigorous effort on the one hand and of recently improving business conditions on the other. As of June 15, 45 percent of the body of degree recipients were employed. As of the same date in previous years, the status of the graduating group was as follows:

Year							ercen nploy	
1938							61	
1937							70	
1936							51	
1935		:					47	
1934							38	

The showing for recipients of the Master's degree chances to be better than that for recipients of the Bachelor's degree—61 percent against 35 percent. From current indications in July it would seem likely that at least 75 per cent of the total group would be employed by September 15. A tabular summary of the Committee's activities is given on page 11.

<sup>&</sup>lt;sup>1</sup> The four students from Roberts College are included here.

TABLE I SUMMARY OF WORK OF THE FACULTY COMMITTEE ON EMPLOYMENT JUNE 16, 1938-JUNE 15, 1939

		1938-39	1937-38	Percent Change from 1937–38
Registrations (new)		75 57	751 5	, ,,,,
Students		<b>23</b> 9	215	+11.0
Alumni		88	121	-28.0
		•		
Total		327	336	— 3.0
Requisitions				
Business firms		89	146	-39.0
Educational institutions		49	63	-23.0
Government agencies		10	11	<b>— 1.</b> 0
Total		148	220	33.0
Persons called for by				
Business firms		117	190	-39.0
Educational institutions		52	68	-24.0
Government agencies		28	34	—18.o
T . 1		<del></del>		
Total	•	197	292	—33.o
References to jobs				
Students			169	+ 8.o
Alumni		112	219	-49.0
Total		295	388	-24.0
DI I			_	
Placements made				
		54	56	<b>—</b> 4.0
Alumni		31	36	—14.0
Total		85	92	— 8.o

The following table presents a classification by fields of activity of student and alumni registrations for employment received during the past three academic years. The several fields continue in much the same order of interest except for the dropping of finance and banking to a subordinate position. It is to be noted that the percentage results on an annual comparative basis are a bit skewed by virtue of the setting up of new categories by abstraction from the miscellaneous group.

TABLE II

REGISTRATIONS WITH THE FACULTY COMMITTEE ON EMPLOYMENT, 1938–39
WITH COMPARATIVE PERCENTAGES FOR 1936–37 AND 1937–38

				Ν	umber of			
				R	egistrants	Percent of	Total Regi	istrations
Field					1938–39	1938–39	1937-38	1936–37
Accounting .					102	31.2	28.8	25.0
Merchandising					<b>3</b> 6	11.0	11.2	8.5
Secretarial .					28	8.6	8.4	16.0
Advertising .					28	8.6	7.4	8.2
Statistics and re	esea	ırch			24	7-3	7.9	11.0
Teaching .					24	7.3	3.7	4.6
Banking and fi					23	7.0	12.5	14.1
Personnel .					13	3.9		
Foreign trade					11	3.4	1.5	
Sales					9	2.7	4.7	3.3
Transportation					5	1.6	1.9	
Insurance .					5	1.6	3.2	0.9
Miscellaneous					11	3.4	5.6	5.6
Undecided .					8	2.4	3.2	2.8
Total					327	100.0	100.0	100.0

Tables III and IV give the data on requisitions received from employers and on placements, respectively.

TABLE III

REQUISITIONS RECEIVED FROM EMPLOYERS BY THE FACULTY COMMITTEE

ON EMPLOYMENT, 1938-39

	Requi	sitions	Persons	Wanted
Field	Number	Percent	Number	Percent
Teaching	49	33.1	52	<b>2</b> 6.4
Accounting	30	20.3	46	23.4
Research and statistics	22	14.9	26	13.2

	Requisiti	ons	Persons 1	Wanted
Field	Number		Number	Percent
Secretarial	8	5.4	8	4.0
Merchandising	7	4.7	9	4.5
Sales	7	4.7	18	9.1
Training courses	7	4.7	13	6.6
Finance and banking	3	2.0	5	2.5
Clerical	3	2.0	3	1.6
Insurance (nonselling)	2	1.4	3	1.6
Advertising	2	1.4	2	1.0
Executive	I	0.7	I	0.5
Transportation	I	0.7	I	0.5
Miscellaneous	6	4.0	10	5.1
Total	148	100.0	197	100.0

TABLE IV

PLACEMENTS MADE BY THE FACULTY COMMITTEE ON EMPLOYMENT

1938-39

Field				lumber of lacements	Percent of Total
Accounting				20	23.5
Research and statistics				19	22.3
Teaching				10	11.8
Secretarial				6	7.0
Merchandising				6	7.0
Clerical				5	5.9
Training courses .				4	4.7
Insurance				2	2.4
Finance and banking				2	2.4
Executive				I	1.2
Miscellaneous				10	11.8
Total				85	0.001

In coöperation with the University Appointments Office our program of Occupational Conferences was presented as usual with a further improvement in the technique of making available occupational information through the medium of informal talks by business practitioners.

Approximately six hundred students attended the sessions which included two general meetings on the topic "How to Get a Job" conducted by Mr. Paul Boynton, of the Personnel Department of Socony Vacuum Oil Company; a special presentation of opportunities for college graduates with the Federal Bureau of Investigation by Mr. Dwight Brantley, special agent in charge of the New York office; an illustrated lecture on opportunities in aviation by Aviation Cadet Spencer F. Weaver, U.S.N.R.; and panel discussions in the fields of accounting, advertising, industrial relations, and merchandising. In this connection we wish to extend our thanks to the above-named persons and to Mr. Duncan Merriwether, Mr. Gilbert Goold, and Mr. Charles Neale who served as chairmen of the panels in accounting, advertising, and merchandising, respectively. Professor Paul F. Brissenden was instrumental in bringing to the conferences a most distinguished group of specialists in the field of industrial relations and himself served as chairman of the panel. The Conference program was greatly enriched by the participation of a number of non-Columbia business practitioners to whom we owe a special debt of gratitude. To the School of Business and Columbia College alumni who served as members of the several panels we are deeply grateful. Suggestions and advice from School of Business Faculty members contributed much to the success of the project. Campus publicity was exceptionally well handled by an enthusiastic student committee.

A minor activity during the year was our participation in the preliminary stages of a study of the objectives and accomplishments of schools of business which is to be made by a joint committee of the American Council on Education and the American Association of Collegiate Schools of Business. One hundred of our graduates were canvassed in this connection.

On May 4 and 5 of this year, Mr. Robert D. Gracey, of Price, Waterhouse and Company, and Mr. Warren W. Nissley, of Arthur Young and Company, made a careful review of the students in the first and second years of the professional accounting curriculum on behalf of our Advisory Committee on Professional Accountancy. Students were appraised in terms of their qualifications for employment, upon completion of the course, by the type of public accounting firm represented on the Advisory

Committee. The evaluation was made on the basis of an examination of the personal and scholastic record plus an individual interview with each student.

Our School is rapidly nearing the end of its first quarter-century. In basic features of curricular organization we have undergone little change between 1916 and 1939. There has been some proliferation of courses, a bit of embroidering in spots, and a sharpening of focus consequent upon increasingly competent instruction in various fields; but basic structure and emphasis have remained the same. We treat vocational detail as incidental and stress phases of instruction which contribute to personal mobility and to some appreciation of the character and quality of managerial responsibility. We are often told that there are huge gaps in our curriculum which we should proceed at once to bridge; that we should give much more instruction than we do in details of business performance such as would fit individuals into a wide variety of highly specialized jobs. And there is much to be said for expansion of this sort in the right place and at the right time. The right place is in an extension or continuation division, and the right time is that part of each day available to persons already actively engaged in business. Evening courses conducted by skilled practitioners of the business arts on a conference basis should be provided by the University and are already so provided on a measurably adequate scale. But to attempt by means of proliferation to organize a rounded educational scheme for inexperienced beginners would be a mistake of no small order of magnitude. The "gap" philosophy and practice of curricular organization is guilty of sins of commission far outweighing any sins of omission chargeable to a shortage of course provision. There are unquestionably gaps that need to be bridged or filled. Any deficiency of provision which leads to neglect of fruitful techniques, or to denial of acquaintance with domains of knowledge having broadly distinctive qualities, or to insulation from access to inspiring minds, should be repaired as soon as feasible. But to expand courses merely to exploit the many minor variants of current business experience and practice, or to retail the constantly enlarging flow of information about business routine is to encourage waste of educational effort and to defeat its main purpose. That purpose is to inspire curiosity and to guide toward

approaches and techniques such as may encourage ingenuity and minimize the wastefulness of much individual effort. That purpose is not to set fixed imitative patterns nor to provide channels for the regurgitation of predigested educational provender.

Business education is not the only sinner in this latter regard. In most sectors of the field of liberal education possibilities of expansion and of specialization in detail have not been neglected. Teachers of history frequently exploit these possibilities in terms of time and space so richly available in their field. Courses multiply on the history of England and France and Russia, as well as of Italy, Mexico, and Finland. And the course treatment of historical developments in these geographic subdivisions is complemented by further subdivisions of treatment on a temporal basis. Students are administered an increasingly meticulous dosing in factual data from 1760 to 1789, from 1789 to 1815, from 1815 to 1860, from 1860 to 1914, and from 1914 to 1939. The year 1939 may well mark another starting point for future courses with time limitations. Teachers of literature have not been immune to similar infection. Besides temporal and spatial bases of expansion they can and do follow the biographic lead of the historian into course elaborations of the lives and works of individual authors. In consequence we have courses not only on Shakespeare and Milton and Goethe, but also on Keats and Heine, on Galsworthy and other moderns from Herman Melville to Theodore Dreiser.

And when we proceed from history and literature to the teaching of methods of teaching the whole battery of subjects in higher and lower curricula, the coverage is not only momentarily complete, but full of cumulative possibilities for the future. Those who follow this policy of course expansion seem to be aiming at a painless if not effortless process of educational procedure, failing to realize that effort is futile and painful only when it is merely absorptive and repetitive, not when it is really creative.

These are difficult times for seats of higher learning, particularly for those dependent on private endowments. Possibilities of indefinite ramification of curricula are limited by growing shortage of funds and of return therefrom, by declining growth of population, and by other influences pointing toward inevitable economy. The necessity for increas-

ing economy is likely to force a reappraisal of educational effort and a readjustment of means to clearly envisioned educational ends.

I suspect that when we succeed in fitting our educational garment to the body it is really meant to shelter and adorn, our supply of cloth will be adequate.

Respectfully submitted,

Roswell C. McCrea,

Dean

June 30, 1939

## SCHOOL OF DENTAL AND ORAL SURGERY

#### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

SIR:

I have the honor of submitting the report of the School of Dental and Oral Surgery for the year ending June 30, 1939.

The number of applicants for admission to the class entering in September, 1938, was 315, which is forty-five more than applied the previous year. Of this number fifty were accepted and registered. One hundred and seventeen were rejected because of their academic record, and, of those remaining, forty-nine were rejected as a result of the ability tests and the personal interviews with members of the admissions committee. The fifty students that were accepted came from twenty-two colleges and universities.

Fifty-one seniors received the Doctor of Dental Surgery degree on June 6. Of this number all but three held the baccalaureate degree. The Ewell Prize Medal was awarded to Robert Irving Mason, the Rowe-Wiberg Medal to Harry Quain, and the Sigma Epsilon Delta Award to Milton Wechsler.

There was \$4,250 awarded to students in all classes for exceptional scholarship. Additional funds for this purpose are greatly needed to make it possible for the exceptional student who lacks funds to pursue the long and expensive course.

Eighteen members of the graduating class have accepted internships for the coming year. It is gratifying to note that more hospitals are offering dental internships and that an increasing number of graduates voluntarily undertake this additional year of training.

Twenty-two postgraduate students were enrolled for the twelve-month training leading to the certificate of proficiency. The certificate was awarded to seven students majoring in orthodontics and to one majoring in oral surgery.

Sixty-two practitioners have taken advantage of the short refresher courses that have been offered during the year. The courses given in orthodontics under University Extension were especially well received. Twenty orthodontists from fourteen states took the course given under the directorship of Dr. Robert H. W. Strang and twenty-nine from seventeen states, the course given by Dr. John V. Mershon and his assistants. Eleven similar courses have been offered by the Division of Orthodontics with an enrollment of 240 orthodontists from thirty-five states and four foreign countries. One student is enrolled in the DeLamar Institute of Public Health for the Master of Science degree in public health. This is the first year in which this course has been offered to dentists.

Professors Adolph Berger and Leroy L. Hartman were promoted to the rank of Commander in the United States Naval Reserve Corps. This is especially noteworthy in view of the fact that there are only four members of the Corps holding this rank. Professor Charles F. Bodecker was selected as the recipient of the Jarvie Medal by the Dental Society of the State of New York for his many notable achievements in research dealing with dental problems. Professor Milo Hellman received the Albert H. Ketcham Memorial Award of the American Board of Orthodontics.

We were fortunate to have as guests during the year several prominent histopathologists who addressed the students and Faculty: Isaac Schour, D.D.S., Ph.D., Professor of Histology, College of Dentistry, University of Illinois; Joseph P. Weinmann, M.D., of Vienna; Balint V. Orban, M.D., D.D.S., Assistant Professor of Pathology, Northwestern University Dental School; and Rudolph Kronfeld, M.D., D.D.S., Professor of Dental Histology, Chicago College of Dental Surgery.

With others who have been obliged to leave Germany many dentists have come to the United States hoping to re-establish themselves in practice. A great many of these are poorly qualified to practice, according to our standards. The State Education Department has allowed some of these refugees credit for two years of work toward the dental degree. In order to be eligible for the licensing examination it is necessary for them to graduate from a registered dental school. This has presented a real problem to the schools. Some institutions endeavored to provide the necessary training in one year, whereas some required the full four years of the dental course, and others refused to accept them on any basis. Our policy has been to accept these men as unclassified students, provided their

predental training satisfied our requirement of three years of college work. Most of the expatriate dentists have only the *Gymnasium* training as a background for their professional studies and hence have not been able to qualify from that standpoint. Those who have this background are required to perform the technical work of the first two years of the dental course and are then accepted into the junior class. Our experience thus far would indicate that it may be better to insist upon these dentists taking the full four-year course, in order that they may be as competent in practice as others receiving the Doctor of Dental Surgery degree from Columbia.

Original investigation of some sort is regarded as an essential part of the duty of every teacher in the School, and a number of very worth-while projects are under way, both in the biological science field and in the clinical and technical branches. Dr. Joseph P. Weinmann, formerly of Vienna and for the past year with the University of Illinois, has joined the staff as a full-time research worker under a grant by the Rosenwald Family Corporation.

Professor William M. Rogers and Dr. Harry Shapiro, of the Department of Anatomy, completed a series of experiments analyzing the factors involved in shedding of deciduous teeth. This study was reported at the annual meeting of the International Association for Dental Research at Cleveland, Ohio, and at the annual meeting of the American Association of Anatomists at Boston, Massachusetts. The report of the results of a comparative study of root resorption was presented at the midwinter meeting of the New York Society of Orthodontists. A paper on the "Anatomy of the Temporomandibular Articulation" was presented before the Society of Oral Pathology at the New York Academy of Medicine.

Dr. Shapiro presented a paper on "Anatomy as Related to the Problems of the Edentulous Mouth" before the prosthetic section of the First District Dental Society at the New York Academy. Experiments are being continued on the problem of resorption and injury as related to tooth development, and on changes in alveolar bone produced by movement of teeth through the application of orthodontic appliances.

Three complete reports covering the study of dental caries in Alaskan Eskimos, in which Professor Theodor Rosebury, of the Department of

Bacteriology, participated, were published in the American Journal of Diseases of Children. Two reports on experimental dental caries in rats were published in the Journal of Dental Research. Another report by Dr. Rosebury, describing the production of dental caries in rats by feeding hard pilot biscuit and linking the previous experimental findings with the Eskimo data and with the problem of dental caries in man generally, is now in press.

A report on studies of experimental fuso-spirochetal (Vincent's) infection in guinea pigs was presented by Dr. Rosebury before the Chicago Dental Society. This report contained a description of the characteristics of the experimental disease and its accompanying mixed bacterial flora. Further studies have dealt with the effects on this disease of neoarsphenamine and sulpharsphenamine. These drugs have been used extensively in both oral and extra-oral Vincent's infection in man, but their value has never been subjected to adequate critical appraisal. The findings of the studies, which accord with such clinical data as are available, suggest that topical application of neoarsphenamine is rational therapy of Vincent's infection of accessible areas (such as mouth or throat), but that intravenous or intramuscular therapy with either arsenical is of doubtful utility.

Mr. Fred L. Rights is continuing his studies of pure cultivation of spirochetes and other members of the fuso-spirochetal flora. Several pure cultures have been obtained of each of the organisms regarded by other workers as essential components of the infective mixture, but thus far such mixtures have not been found pathogenic for animals.

Professor Maxwell Karshan reports that the metabolism experiments, carried out in collaboration with Dr. E. H. Siegel and Professor Leuman M. Waugh, on the utilization of calcium, phosphorus, and nitrogen by groups of Alaskan Eskimo children with and without dental caries, have been completed. No correlation was found between the retentions of these elements and the presence or absence of decay. The data suggest that freedom from caries, found in most Eskimos in the area studied, may exist despite such diverse conditions as diets (a) low in calcium and moderately high in phosphorus, or (b) very high in both calcium and phosphorus; (c) potentially acid, or (d) potentially basic; (e) resulting in high positive metabolic balances of both calcium and phosphorus, or (f) large negative

balance of both calcium and phosphorus. The report of this work has been accepted for publication in the *American Journal of Diseases of Children*.

Studies of the chemical composition of unstimulated and stimulated saliva in relation to dental caries were continued. In both types of saliva higher mean values were found in the caries-free than in the active-caries group for carbon dioxide capacity (a measure of the ability of saliva to neutralize acid), total calcium, inorganic phosphate, and the percent of calcium removed from saliva on shaking with tricalcium phosphate. A lower mean value in the percent of calcium removed from saliva on shaking with tricalcium phosphate was found in stimulated saliva of the cariesfree than in the active-caries group. These results are related to dental caries in so far as they are concerned with the conditions governing the destructibility or solubility of enamel. The findings indicate that the saliva of persons free from dental caries would protect enamel against solution by acids to a greater extent than would the saliva of persons with active decay. The studies of saliva in relation to dental decay and calculus formation, carried out in collaboration with Professors Rosebury and Waugh, appear in the May, 1939, issue of the American Journal of Diseases of Children.

Studies, in collaboration with Dr. B. Tenenbaum, of the chemical composition of unstimulated and stimulated saliva were also continued. In both types of saliva, statistically significant differences were found between calculus-free and calculus groups in the contents of calcium and inorganic phosphate. These findings indicate that the average concentrations of calcium and inorganic phosphate in saliva of persons who form calculus are relatively such as to favor the precipitation of the inorganic salts found in the deposit. The importance of these findings lies in the probable relation of salivary calculus to the etiology of periodontal disease. In a further effort to throw light on the etiology of this disease, an investigation of the blood chemistry of individuals with advanced pyorrhea is now in progress.

Dr. Siegel is studying the acid production by oral lactobacilli, streptococci, and yeasts from various carbohydrates.

The Division of Dentistry for Children under the direction of Professor Ewing C. McBeath is conducting a study of dental caries with about 140 children at Letchworth Village, to determine further the nutritional control of caries and the more effective and specific dosages of the protective factors. Professor Theodore F. Zucker, of the Department of Pathology, is collaborating in these experiments.

Dr. Bennett M. Lathrop is continuing his observations on the correlation of the degree of mental deficiency with tooth eruption time. Indications are that the findings will indicate a relationship.

Professor Milo Hellman, of the Orthodontics Division, has been carrying on research during the year on the following lines: a standard for measuring facial features; classification of facial types based on the occlusion of the teeth; the development of the dentition in modern man; and, in collaboration with Professor William K. Gregory, studies in evolution of the human dentition (the ape man of South Africa), and the evolution and comparative anatomy of the carnivores.

Professor Leuman M. Waugh and Dr. Donald B. Waugh are continuing their studies of biting strength of primitive and modernized Eskimos. In the field study by Professor Waugh, referred to in last year's report, diet experiments were performed on natives of different ages in three different settlements of the lower Kuskokwim River in southwestern Alaska. A total of forty-six persons were included in the experiment: twenty-two on natural sugars, fifteen of whom were caries-free; and twenty-four on the refined sugars, eleven of whom were caries-free. In the group on natural sugars, no inception of caries took place, and there was no increase in oral lactobacilli. The increase in caries in the carious mouths of this group showed what might be considered a normal increase in cavities for that period of time. In the refined sugar group, caries was initiated in a large number of the mouths, and every case showed the presence of oral lactobacilli at the conclusion of the experiment. An increase which must be considered above normal for that period occurred in the carious mouths. This study was supported by grants from the Office of Indian Affairs, United States Department of the Interior.

The research activities of the Diagnosis Division have progressed favorably. The following studies conducted by Professor Daniel E. Ziskin have been reported: (1) "Hormonal Therapy for Some Gingival Conditions"; (2) "Effect of Thyro-parathyroidectomy on the Development of Rats" (in collaboration with Dr. T. N. Salmon, of the Department of

Anatomy, and Professor Edmund Applebaum, of the Division of Oral Histology); and (3) "Effect of Hypophysectomy on Developing Permanent Dentition of Rhesus Monkeys" (in collaboration with Professor Edmund Applebaum).

Additional work on the role of the thyroid and pituitary glands in affecting the development of the dental structures is in progress. Professor

Applebaum is collaborating in these studies.

Dr. Edward V. Zegarelli, of the Diagnosis Division, has engaged in the following research activities this year: (1) "Clinical Study of Electrical Pulp Tests on Permanent Teeth"; (2) "Electrical Pulp Testing as a Means of Determining Status of Vital Pulps in Permanent Teeth Which Were Exposed and 'Pulp Capped'" (in collaboration with Professor Carl R. Oman, of the Operative Division); and (3) "Study of the Action of Lactic Acid on Enamel" (in collaboration with Professor Bodecker and Dr. Lefkowitz, of the Division of Oral Histology).

Professor Charles F. Bodecker, in collaboration with Dr. William Lef-kowitz, is continuing the study of the "dental lymph." They have observed that pulpless teeth soon lose their permeability as a result of a drying of the lymph, and that after this has occurred, their sterilization is more difficult.

Reports describing some of the research being carried on in the Division of Oral Histology by Professor Edmund Applebaum have been published, particularly his Grenz-ray studies of the calcification of enamel, tissue changes in dental caries, and the adaptation of bone to stresses produced by natural and artificial teeth.

The research carried on during the year in the field of the human embryology by Professor Moses Diamond, with the coöperation of Professor Bodecker, has been presented in detail in a report to the Rosenwald Family Corporation, which has supplied the funds. Two papers are at present in preparation.

Professor William H. Crawford and Dr. Henry Junemann, of the Division of Prosthetic Dentistry, have been making a study of the temporomandibular relationships and their effect upon pain in that region, tinnitus, loss of hearing, and vertigo. Most of the patients treated have been suffering from pain and tinnitus in the temporomandibular region. Of the cases treated for this trouble, approximately 90 percent have been

relieved of their symptoms. The otolaryngology department of Vanderbilt Clinic at present provides excellent coöperation in this investigation. Dr. Edmund Fowler, Jr., and Dr. Page Northington have been particularly helpful. Audiogram records are being taken systematically of practically all patients and in all cases where there is any indication of hearing loss. So far the investigation has failed to disclose any improvement in hearing by a change in temporomandibular relationships.

Routine testing of materials used in the infirmary and laboratories and the making of cast gold alloys for infirmary use and courses in technique have limited the opportunity for research in dental materials. However, two studies merit mention. One of these has to do with misleading and fraudulent advertising of an amalgam alloy concerning which the Research Commission, supported by various laboratories (one of which was ours), published a complete exposure in the May issue of the *Journal of the American Dental Association*. The other has to do with a casting technique which was about to be foisted upon the dental profession with considerable misinformation. This was detected by our laboratory and exposed at the same meeting at which the casting machine was presented to the profession.

In the Operative Division, Professor Maurice Buchbinder has completed two studies which are ready for publication: a study of chemical sterilization of instruments, and a study of culturing methods for root canals. Two are in progress: anaerobic growth in root canals, and a study of changes in response to electrical stimuli of infected periapical tissues.

Under Professor Buchbinder's supervision, Dr. S. L. Katz has finished a three-year study of radiographic and histologic observations of apical tissues of pulpless teeth. While this work paralleled in many respects the work of Blaney, Coolidge, Rickert, and others, the vast amount of material collected in these studies with serial sections of some fifty-five cases makes this a valuable contribution.

Professor Carl R. Oman has been carrying on a study in the capping of exposed dental pulps. Over one hundred practical cases have been recorded, and the results are being periodically checked with X-rays and the electric pulp tester.

Professor Leroy L. Hartman has continued his important studies on the treating of sensitive dentin and in following up his earlier contribution to the dental profession of the Hartman desensitizing solution. In the Periodontia Division, Professor Harold J. Leonard, with Dr. C. R. Kokatnur, has been studying the presence of peroxidic compounds in the saliva and their interrelationship with salivary catalase as a cause or preventive of dental caries through the action of these agents on mouth bacteria. A preliminary report noting the presence of peroxidic compounds in saliva for the first time and indicating a relationship to caries freedom and susceptibility was presented at the meeting of the International Association for Dental Research in March.

Dr. Frank E. Beube is continuing his animal experimental work in inducing bone growth by the use of calcium phosphate preparations in the form of ground bone in bone wounds. He is also continuing his study of the effects of sodium sulphide on the epithelium and in the healing of periodontal pockets.

Professor Isador Hirschfeld is continuing the clinical study with photographs, which he has been making over many years, of symptoms of periodontal disease.

Professor Adolph Berger, of the Oral Surgery Division, has developed a methodical and secure procedure for closing oro-antral openings. This operation has been successful in his hands and in the hands of a number of his colleagues for several years.

Professor Joseph Schroff has been making a study by means of sialography of undiagnosed swellings of the salivary glands. A preliminary report of this work was presented last winter at a meeting of the oral surgery section of the First District Dental Society of New York.

Many of the undergraduate dental students displayed ability for research while pursuing their basic science courses and in the preparation of their senior theses. It would be highly desirable if graduate fellowships could be provided in order to permit such men to receive training in independent experimental work. There is a distinct need for well-trained investigators of dental problems. Professor Gregersen has especially emphasized the desire of the Physiology Department to place the research facilities of that department at the disposal of qualified graduate students of the Dental School.

In order that the student may continue his interest in oral pathology, and also to emphasize the practical application of this subject, a voluntary

seminar was started this year for the seniors. Discussions of actual cases and correlating symptoms with the pathological changes proved to be of great interest.

Professor Bodecker has proposed a plan which has as its purpose a better correlation between the teaching in the dental schools and the requirements of state boards of examiners. There is a tendency for state board examinations to lag behind the newer scientific knowledge and the newer methods. On the other hand, some schools require the prodding of the state board to keep their teaching from becoming static. The plan involves the presenting of the newer material in the *Journal of Dental Education* for free and open discussion by teachers and by members of licensing boards. Support of the plan by the schools and by the licensing board insures its success.

As part of our program to improve the quality of the teachers and of their teaching, Professor Crawford, at the request of the Operative Division, gave a course in dental materials for members of the staff. This course was greatly appreciated, and the staff is planning for a similar course for next year. A number of the teachers in the Dental School took advantage of the course in applied statistics which Professor Earle B. Phelps, of the DeLamar Institute, gave during the year.

The one-year course for dental hygienists registered fifty-three students and graduated fifty-two. Five thousand, eight hundred and seventy-four patients were treated in the three prophylaxis clinics. At the 59th Street clinic dental prophylaxis was given to the students of four public schools. In the case of the High School of Commerce, where the work has been carried on for a period of several consecutive years, a definite improvement in the condition of the teeth and gums of the patients is obvious. It seems that the greatest opportunity for the dental hygienist lies in the field of dental health education. It is hoped that her training may be extended better to prepare her to function as a teacher of mouth hygiene in our schools and public health organizations. The one year of intensive special training as now given is sufficient to qualify the hygienist to carry on the technical and clinical work which she is at present licensed to perform, but her training should be extended to provide her with training equivalent to that required of other teachers.

Although a hundred years is not a long time in the life of a profession, its completion affords an opportune time to discuss its progress and to lay plans for its future. A century ago dentistry left the fold of medicine and undertook to establish itself as a separate profession. This was brought about by the unwillingness of medicine at that time to recognize any form of specialization and by the lack of sympathy with those teachers in the medical school at the University of Maryland who desired to place more emphasis upon dental problems. From that date to this, dentistry has been an independent calling.

Dentistry made rapid strides, particularly in the mechanical phases of its service. Unfortunately, the biological background received less and less emphasis, and although American dentistry was soon recognized as leading the world, this leadership was based very largely upon ingenuity of a mechanical sort, little attempt being made to discover the essential curative and preventive measures. Moreover, the entrance requirements to schools were lowered, with consequent effects upon the profession. When dentistry had reached this highly specialized mechanical stage, the disclosures of Dr. William Hunter and the discovery and introduction of X-rays revealed the fallacy of trying to build a profession based upon any function of the human body without a thorough background in the biological sciences. At the insistence of the better minds in the profession, and with the help and stimulation afforded by the Carnegie Survey of Dental Education, the proprietary dental schools were closed, and a curriculum was set up on university standards, providing adequate training in the biological sciences in instituting scientific research. In this effort to establish itself unquestionably upon a professional plane of the highest order, dentistry has discovered that the isolation which was so necessary to progress 100 years ago is now a definite handicap to further advancement.

Isolation prevents a large number of outstanding young men and women from going into dentistry because they have been attracted to the larger, more inclusive field before they have discovered the opportunities in dentistry or their own abilities. The Medical School selects its first year students from many applicants. A large number are accepted by other medical schools, but many who have the ability and the professional

ideals are compelled to seek some other field of endeavor as a second choice. The Dental School selects its fifty freshmen from among 300 applicants, and many dental schools are unable to fill their classes.

Isolation has also deprived dentistry of financial assistance while medicine has obtained substantial assistance in augmenting its service to the public. Recognizing the great need for financial assistance in furthering education in dentistry and research in dentistry, and the even greater need to attract more students of character and ability, one university is now contemplating requiring its dental students first to complete the four-year medical course. This seems a wasteful procedure and one likely to reduce rather than augment the number applying to the schools of dentistry. Further, it seems likely that the graduates will be lacking in the necessary skill for the care of the dental needs of today, regardless of how well they may be prepared for teaching or research.

As pointed out in previous reports, the effort in this school is to offer parallel opportunities of high standards to dental and medical students, adapted to the professional needs of each group, based upon a satisfactory previous college education and a thorough grounding in the basic sciences. Research programs in health fields common to both dentistry and medicine and the increase in joint care of patients through consultations and coöperative treatment are contributing materially to the growth of mutual confidence and assistance which ultimately will make effective a satisfactory dental-medical care of the population. Such a mutual responsibility of dentistry and medicine, in coöperation with existing institutions and other professional groups, would provide the essentials of an adequate health program for the entire country.

Respectfully submitted,

WILLARD C. RAPPLEYE,

Dean

June 30, 1939

## SCHOOL OF LIBRARY SERVICE

#### REPORT OF THE DEAN

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

# To the President of the University

SIR:

I have the honor to present the following report on the work of the School of Library Service for the academic year 1938–39.

The total number of students registered for one or more courses in library service during the academic year 1938–39, including the 1938 Summer Session, was 1,071, an increase of 148, or about 16 percent, over the preceding year. The following summary of registration figures for the past four years furnishes a partial supplement to the detailed tabular analysis of registration in each year from 1926–27 to 1935–36, published in the Dean's report for 1935–36.

					1	1935–36	1936-37	1937-38	1938–39
							444	464	543
Winter Session .						369	368	434	. 500
Spring Session .						405	393	442	497
Total registration	n (6	excl	udi	ng					
duplications) .						861	847	9 <b>23</b>	1,071
Degrees granted						189	187	203	215

The number of different institutions from which first-year students received their Bachelor's degrees was 133, as compared with 128 and 129 in the two preceding years. Hunter College continued to lead with twenty-seven; Barnard College with fourteen; Brooklyn College and New York University with ten each.

Of the seventy-eight candidates for the Master's degree, forty-three received the first professional degree from Columbia. The others had previously studied at eighteen different library schools, with five at Drexel Institute and four each at Simmons College, Pratt Institute, and the University of Illinois.

The nation-wide distribution of students scarcely needs to be noted

from year to year. New York (193), of course, leads, with New Jersey (thirty-three), Pennsylvania (seventeen), Ohio (fourteen), Massachusetts (twelve), Iowa (nine), and Maryland (eight), following in that order. Six states, including California, Texas, and Wisconsin, sent five each. Four Western states and New Hampshire sent four each. Six states and the District of Columbia sent three each, including Michigan, Louisiana, and Washington. A valuable by-product of a year's residence in the School is the close association which each student has with students of superior ability and promise from every section of the country.

During the academic year under review 1,003 formal applications were received for admission either as special student or candidate for a degree or certificate. This figure does not include the many informal applications made in person or by correspondence, which did not lead to formal application. Of this number thirty-seven were found to be technically ineligible for admission; seventy-seven applications were withdrawn for one reason or another; while 116 were rejected as not meeting the standards of the School in respect to general ability, scholarship, personality, or some other factor of importance in a successful career in library service. In other words, only about 75 percent of those who apply are actually admitted.

In its attempt to detect and eliminate the mediocre applicant the library school seems to meet two special difficulties not encountered, at least to the same degree, by professional schools in other fields. The first difficulty arises because for so many of the applicants the main reason for deciding upon a library career lies in the fact that they had to work their way through college and found that an appointment as student assistant in the library offered the advantages of a flexible schedule, pleasant and socially respectable employment, and a dependable if not munificent income. Pressure is sometimes put on the librarian to employ needy students without regard to their ability or aptitude for the work. Indeed, in some institutions scholarship aid regularly takes the form of a student assistantship in the library, the librarian not even being consulted. The work of such a library assistant necessarily being of a routine character puts a premium on patience, regularity, and a certain kind of dependability, rather than on imagination, initiative, and the higher levels of ability. The type of student assistant who sticks to the job and earns the commendation of his superiors easily persuades himself that he is cut out to be a librarian. At

all events, that becomes the line of least resistance for the mediocre student assistant, and the stage is all set to make it easy for him to be admitted to the library school after he gets his college degree.

Responsible library authorities unconsciously overrate a certain type of student assistant of mediocre ability. Deans and professors, knowing that the student was able to hold his job in the library, and not being too sure that he would succeed at anything else, lend a willing hand to get him accepted by the library school, with a scholarship if possible. Though no one would think of him as a good prospect for law, or medicine, or engineering, all are willing to agree that he will make a good librarian! It is surprising how often this attitude on the part of college officers and teachers is met with in handling applications for admission. Often they rate an applicant average or less than average in general, but exceptional for library work, obviously assuming that less is required for librarianship than for other professions. It is not meant to imply, of course, that all students who work their way through college as library assistants are mediocre. Undoubtedly some of the most capable men and women in the profession were led to the library school through more or less casual employment as student assistants in their college library.

Forty-nine of the students enrolled held the degree of Master of Arts while twelve had received or were about to receive the degree of Doctor of Philosophy. Whether or not there is a general tendency to require higher degrees along with the professional degree for librarianship it is difficult to say. In many public school systems and state teacher-training agencies librarians are expected or encouraged to qualify for advancement along with teachers by acquiring a Master's degree. In the larger libraries specialists in certain fields of knowledge are desired as curators and departmental librarians, but salaries offered are so low as a rule that such positions are not particularly attractive. A definite tendency is noted among college and university authorities to seek as chief librarian a man who has both advanced training in some field of scholarship and also professional training in librarianship. This may account in part for the larger number of library school students holding the doctoral degree. On the other hand, it may be the result primarily of lack of opportunity for employment, particularly in the teaching field.

For some years there has seemed to be a country-wide dearth of men or

women well qualified to assume the responsibilities of the position of chief librarian in the larger educational institutions. As a considerable number of these positions have to be filled each year, the situation has given no little concern to leaders in the library profession and to educational administrators. Salary ranges for library positions show what has happened. In the larger libraries the salary of chief librarian is often one of the highest in the institution, while salaries of all the rest of the staff, even of the principal assistants, remain at a level far below that of other workers of whom an equivalent amount of education and training are required. At a meeting of the Association of College and Reference Libraries held at San Francisco in June, 1939, this problem was approached from the point of view of the professional training agency. The writer being invited, among others, to discuss the "Essentials in the Training of University Librarians," expressed certain views growing out of his observation and experience which would seem to bear repeating here, since this report may be read by a certain number of librarians and educational administrators who have the opportunity to do what the library schools themselves cannot do in fitting men and women for the higher administrative posts.

The part which a professional school should consciously attempt to play in the preparation of the chief administrator of a university library is not easily thought of apart from the training required for the entire professional staff of the college and university library. The idea of specific training for the head of a college or university library is somewhat analogous to planned training for the college or university president. It would be a fairly simple exercise to set down the main requirements in the way of education, experience, and special abilities required of either of them, but it is not much easier to produce a successful chief librarian for a large university by any course of training than it would be to turn out university presidents by applying some formula to whatever raw material offers itself for the purpose.

The difficulty of finding qualified persons for the more important administrative positions in the larger libraries does not necessarily indicate a need for more attention to library school training for such work, but rather to the need of (1) bringing into university library work people of

a high level of ability with a better and different kind of general education; (2) thorough professional training for the entire professional staff; and (3) more opportunity for intensive experience in positions of some administrative responsibility in various departments of the library. Special emphasis needs to be laid on the importance of the latter. Men and women who show some capacity for administrative responsibilities should be given an opportunity to gain a broad background of experience. It seems to be the lack of such opportunities at present rather than inadequate library school training that makes it so difficult to find material for the chief administrative positions. Among the younger members of the professional staff of every college and university library are persons who, if given an opportunity to supplement their library school training by thorough practical experience in every aspect of the work, would probably make as good or better chief librarians than those who now hold the positions. Not a great deal can be done through extending or improving the library school curriculum. Much can be done, on the other hand, by laying down and vigorously following a rational plan for the practical training on the job of the library school graduate who shows capacity for leader-

A fellowship granted by the American Library Association from funds provided by the Carnegie Corporation was held by Marion E. Gilroy, B.S., 1932, Acadia University, M.A., 1933, University of Toronto. Jorge Rivera, B.A., 1938, Polytechnic Institute of Puerto Rico; Charles R. Topshee, B.A., 1932, St. Francis Xavier (Nova Scotia); and Héctor Fuenzalida, B.A., 1925, Liceo de Aplicación (Chile) studied on grants received from the Rockefeller Foundation. Roberts Fellowships, awarded by the University to students born in Iowa and graduated from an Iowa college or university, were held by Martha A. Foster, A.B., 1936, Drake University, and Robert W. Orr, B.S., 1930, Iowa State College.

The Florence Woodworth Alumni Scholarship was held by Mrs. Frances N. Cheney, A.B., 1928, Vanderbilt University, B.S. in L.S., 1934, Peabody College for Teachers; the Edna M. Sanderson Scholarship by Gretchen Westervelt, B.S., 1933, St. Lawrence University, B.S., 1938, School of Library Service; and the James I. Wyer Scholarship by Joseph T. Wheeler, A.B., 1935, Johns Hopkins University, A.M., 1936, Brown University, A.M.,

versity. An additional scholarship from accumulated balances in alumni scholarship funds was granted to Lois E. Engleman, A.B., 1922, James Millikin University, B.S. in L.S., 1931, Western Reserve University.

The fifth volume of the "Columbia University Studies in Library Service," published by Columbia University Press on January 16, 1939, was entitled Some European Architectural Libraries, Their Methods, Equipment, and Administration, by Mr. Talbot Hamlin, Librarian of the Avery library. Mr. Hamlin's visit to European libraries in the summer of 1937 to collect material for the volume was made possible by a grant from the Rockefeller Foundation.

In recognition of the growing importance of libraries in public schools a conference on school library service was planned for the five days immediately preceding the opening of the 1939 Summer Session, to begin on June 28 and run through July 3. Miss Anna Clark Kennedy, Senior Supervisor of School Libraries of the New York State Education Department, was largely responsible for the selection of topics and speakers. Though not a part of the Summer Session, the Conference was in effect an intensive course for experienced school librarians covering recent social and educational developments in their implications for the school librarian.

The Statutes of the University having been amended to provide an elected delegate to the University Council, in addition to the ex-officio membership of the Dean, the Faculty at a meeting held on October 20, 1938, elected Professor Lucy E. Fay to be its delegate for a three-year term beginning July 1, 1939.

Professor John S. Cleavinger had special leave of absence during the Winter Session to enable him to accept an invitation from the Board of Education of the American Library Association to make a survey of library personnel and training agencies in the state of Michigan. He spent the months of October and November and a part of December visiting nearly a hundred libraries of all kinds. His report was presented to the Board in May and will be published some time next year. During his absence his seminar in public library administration was given by Paul North Rice, chief of the Reference Department of the New York Public Library, and his courses in book selection by Miss Esther Johnston, librarian of the Central Circulation Branch of the New York Public Library.

Professor Mary M. Shaver had regular sabbatical leave during the Spring Session. Leave of absence on account of illness granted to Professor Alice I. Hazeltine for the Spring Session was later extended to cover the Winter Session as well. Fortunately it was possible to put her courses in the hands of Miss Effie L. Power, who has been on the Summer Session teaching staff for several years and had substituted for Professor Hazeltine during her sabbatical leave in the Winter Session of the year before, following her recent retirement from the position of Director of Work with Children in the Cleveland Public Library.

Respectfully submitted,

C. C. WILLIAMSON,

Dean

June 30, 1939

### UNIVERSITY ADMISSIONS

### REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

I have the honor to submit to you the report of the Director of University Admissions for the year ending June 30, 1939.

It is pleasant to report that the number of applicants for admission in September, 1938, was the greatest ever received by the University, the total being 6,220 as against the total of 5,578 applications received for September, 1937. Marked increases were recorded in the number of applications for admission to Columbia College and the professional schools of Architecture, Engineering, Law, Library Service, and the Faculties of Political Science, Pure Science, and Philosophy. The Schools of Business and of Journalism and the courses in optometry received fewer applicants in 1938 than were received in 1937.

An examination of our records for the past nine years, which is the period during which accurate and complete records of receipt of applications have been kept in the Office of University Admissions, will show that from 1931 to 1935 we received each year more applications than we had received the previous year. Since 1935 there have been fluctuations of which the one recorded in the preceding paragraph is the most notable, but in the main our total of applications received has held each year at about 5,500. There seems no reason to expect that there will be any upward change in this total figure in the near future, nor for that matter is there any reason to hope or wish that the number of our applicants will increase. At present the University has enough and more than enough applicants to fill every school of the University, and there has been little real difficulty in finding each year enough new students for each of our professional schools and graduate departments.

This is not to be construed as a statement that we are satisfied with the results of our admission program. The fact is that we feel that our most important and necessary work, that of attracting better rather than more

applicants, has only begun and that it must continue for years to come with the closest coördination between the Admissions Office and the administrative officers and faculties of the several schools, before we can be satisfied that the group of applicants measures up to our standards in every possible way.

During the past year the work of the Admissions Office has continued with little change in procedure or policy. At the instance of the Departments of Biology, Chemistry, Geology, and History, a careful study of the applicants for admission to those departments was undertaken and certain changes in admission procedure made, involving careful consideration of full credentials and in many cases the added requirement of a personal interview by a representative of the Admissions Office or the department, or by both. In the case of the History Department there was added an examination of the candidates' competence in the use of the English language, deemed advisable because of the number of applicants to that department whose written work as graduate students had proved to be consistently unsatisfactory. That the examination was necessary is shown by the fact that on the most recent of these examinations in English composition given to prospective graduate students in history, pitched at the level of accomplishment that would be expected of a Columbia College sophomore, one-third of those examined failed, including graduates of many of our leading colleges and at least one member of Phi Beta Kappa.

The immediate result of these changes in admission procedure will be reflected in the registration figures for September, 1939, which will show a drop in the number of new registrants in each of those departments. However, we have every confidence, based on our experiences with applicants for admission to Columbia College and the courses in optometry, to mention but two outstanding examples, that this drop will be only temporary and that within three years each of those departments will have more and better applicants than they have had at any previous time.

Of the four graduate departments mentioned only one, History, is trying a selective admission policy for the first time. The other three departments, Biology, Chemistry, and Geology, have for several years exercised care in the selection of their new students, and their present action only represents provision for even more careful scrutiny of the

applicants' credentials. The fact that these four important departments, in addition to the Departments of Economics and Psychology, have adopted the selective admission of graduate students represents real progress toward the university-wide adoption of that principle which the first Director of University Admissions, Professor Adam Leroy Jones, considered as basic for any real educational program. Our work in the selection of all our students, graduate and undergraduate, represents the best possible tribute to Professor Jones, for it could not be done if it were not for his pioneer efforts in planning and working out a logical program for the admission of students.

By action of the Faculty of Columbia College, the September series of entrance examinations is to be discontinued after the conclusion of the September, 1939, series. These examinations, inaugurated at a time when the largest number of our applicants for admission appeared in the summer instead of in the early spring as they now do, and when admission to Columbia was based entirely upon entrance examinations, no longer serve their original purpose. They have, in fact, become the last resort of students who have failed the June examinations of the College Entrance Examination Board and are trying desperately to add entrance credits to the record which they hope to present another year to the college of their choice. In addition to the fact that few students have been examined and that they were for the most part poorly prepared, the examinations have been a real expense. It is necessary to have prepared at a considerable cost papers which are used each year by only a very few candidates, to have them marked with all speed, and to forward the results of the examinations to other institutions, all at a time when there is much other and more important work. Under these circumstances the examinations have become an embarrassment, and the action of the Faculty brings a welcome relief. This move was not taken until the recognized need for a September series of examinations had been met by the action of the College Entrance Examination Board in authorizing the inauguration of a new series of fall examinations to be administered for the first time in September, 1940. This assumption by the country's most experienced examining body of still another task happily relieves the University of a responsibility which had become a burden.

One of the most interesting tasks of the Director of University Admis-

sions is the direction, in his capacity as Secretary of the Pulitzer Free Scholarship Committee, of the annual competition for these valuable scholarships. That task has been considerably eased in the past year by the use of the scholarship examinations of the College Entrance Examination Board in place of subject-matter examinations in fifteen entrance units as formerly required. Since the scholarship examinations are given in April, we are enabled to finish all the work of selection among the scholarship competitors before the close of the academic year instead of, as formerly, in the following September. In this connection it should be noted that Mr. Harry Schwartz, a Pulitzer Scholar now an undergraduate in Columbia College, has undertaken an informative and valuable study of the activities of former holders of the Pulitzer Scholarships. The results of his study, showing the truly remarkable contribution that has resulted from the establishment of these scholarships fifty years ago, will appear in a short article to be published in the December issue of the Columbia University Quarterly entitled "The Pulitzer Scholarships-A Record of Fifty Years."

The study of the problems of college and university admission is one which must continue at all times if the University is to have the benefit of the continuous examination of problems of curriculum, administration, guidance, and personnel that is carried on in our various institutions. Just as twenty years ago the introduction of tests of mental ability opened to colleges an entire new field in objective testing which even yet has not been explored fully, so today, while we continue to seek better ways of testing the aptitude and probable accomplishment of our applicants, we must take cognizance of the experimentation in curricula which is now being carried on in many of our leading secondary schools. Proposals for changes in the entrance requirements which, while emphasizing ability and accomplishment as the factors controlling the admission of any applicant, will permit the Committee on University Admissions to waive certain required units in the cases of candidates who can offer convincing proof of their ability and fitness, are now being considered and will be submitted to the Faculty of Columbia College during the coming year.

I regret to report the resignation on June 30, 1939, for reasons of health, of Miss Fern E. Boland. Miss Boland, by virtue of her fourteen years of service, was the senior member of the office staff, and her departure lost to

the University a faithful and tireless worker whose organizing ability and experience will be sorely missed.

In closing this brief report may I again express the appreciation of the entire staff of the Office of University Admissions for the coöperation with all members of the University community that it has been privileged to enjoy. The pleasure in recording this coöperation is enhanced by the knowledge that through it we have been enabled to select an able and well-prepared body of students for the further advancement of the University's work.

Respectfully submitted,

Frank H. Bowles,

Director

June 30, 1939

## REPORT OF THE UNIVERSITY MEDICAL OFFICER

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

# To the President of the University

Sir:

As University Medical Officer, I have the honor to submit the following summary of the work of the department under my direction for the academic year 1938–39.

The major responsibilities of the medical staff throughout the year have been the care of those students, Faculty, and employees who reported to the Medical Office because of acute or chronic illness. A complete record of all cases treated under our health service has been kept and classified. The following tables give a summary of these records. Unfortunately, the lack of space prohibits the inclusion in this report of the detailed study.

#### OFFICE CONSULTATIONS

University office							36,684
Barnard College office							9,546
Teachers College office							5,418
Johnson Hall Infirmary office							2,238
John Jay Hall Infirmary office							2,018
Whittier Hall Infirmary office							1,323
Total							57,227

#### NUMBER OF INDIVIDUALS RECEIVING OFFICE SERVICE

	Men	Women	Total
University office	4,344	3,054	7,398
Barnard College office		1,053	1,053
Teachers College office	180	1,210	1,390
Johnson Hall Infirmary office		1,436	1,436
John Jay Hall Infirmary office	786		786
Whittier Hall Infirmary office		515	515
Total	5,310	7,268	12,578

#### INFIRMARIES

					Bed Patients	Infirmary Days	Average Days of Treatment
Johnson Hall					496	2,255	4.05
John Jay Hall					306	1,357	4.04
Total					802	3,612	4.05

#### CLASSIFICATION OF CASES

02.100111011 01 0.1020		Conferences,
Conditions	Number of Cases	Examinations, Treatments
Diseases of the psychobiological unit	45	241
Mental disorders	407	833
Diseases of the body as a whole	1,347	1,997
Regional diseases	1,317	2,750
Diseases of the skin, subcutaneous areolar tissue, and		
superficial mucous membrane	3,120	6,557
Diseases of the breast	32	69
Diseases of the musculo-skeletal system	2,036	4,398
Diseases of the respiratory system	4,690	8,946
Diseases of the cardiovascular system	514	840
Diseases of the hemic and lymphatic systems	147	255
Diseases of the digestive system	4,677	6,884
Diseases of the abdomen, generally, and peritoneum .	61	114
Diseases of the urinary system	77	158
Diseases of the genital system	· 448	757
Diseases of the endocrine system	17	29
Diseases of the nervous system	559	691
Diseases of the eye	1,584	1,864
Diseases of the ear	635	1,415
Nondiagnostic terms	161	200
Medical problems		4,707
Nonmedical problems		205
Miscellaneous		
Examinations		
Diagnostic		2,334
Columbia College		644
Employee		280
Food handler		371
X-rays		833
Baking		20
Infrared		1,329
Ultraviolet ray		802
Vaccine		899
Barnard College office (unclassified)		4,589
, , , , , , , , , , , , , , , , , , ,		
Total	21,874	56,011
Laboratory tests		1,759

As may be judged from the above tables the service has been an active one and has covered a broad field in the practice of medicine and surgery. The year was practically free from epidemics and the diseases were for the

most part of the ambulatory type which, while affecting the efficiency of the workers, nevertheless permitted them to perform their academic duties without much loss of time. Respiratory diseases made up about 21 percent of the 21,874 classified cases. Diseases of the digestive system claimed a like percentage. The surgical division of our service, under Dr. Kenneth M. Lewis, was very busy throughout the year.

The Medical Office has functioned every college day: Saturday from nine to twelve; other days from nine to five, with the nursing staff on duty all of these times. Physicians have been in attendance regularly from nine-thirty to one-thirty and from two to four; at other times by appointment. The infirmaries are on a continuous twenty-four-hour basis.

Since research at the University is carried on in the laboratories day and night, it is necessary for the medical service to be so organized that it can meet efficiently and promptly emergencies at all hours including college holidays, Sundays, and vacation periods. A telephone call to the Medical Office at any hour of the day or night is answered by a graduate nurse, and is possible every hour, every day throughout the calendar year. The nurse on desk duty is qualified to meet emergencies and is in direct touch with available physicians, nurses, hospitals, and ambulance service. Through the coöperation of the Director of Laboratories, Professor J. Enrique Zanetti, there have been installed in our laboratory buildings at points within easy reach of all laboratories large lockers containing supplies necessary to meet the demands of serious accidents. These lockers contain blankets, surgical dressings, and solutions for the immediate care of severe chemical or heat burns. The nurse or doctor responding to a call always carries an emergency bag fully equipped with drugs and surgical supplies to meet common emergencies; but he cannot carry the supplies necessary for the treatment of extensive body injuries, such as are likely to occur in bad explosions. Strapped to each emergency locker is a stretcher for transporting a patient to the Medical Office, infirmary, or hospital. To make it possible in cases of accident to communicate at once with the Medical Office and other parts of the University, the Director of Laboratories has had a telephone installed beside each locker. Concise instructions inform the reader what to do in case of emergency. These lockers are kept equipped by the University Medical Office. The Medical Office and the library of the Department of Chemistry have placed upon their shelves for the benefit of staff and students the publications of the National Safety Council. The chemical laboratories have been fully equipped by Professor Zanetti with safety devices, so that with intelligent care on the part of the staff and students accidents should be at a minimum. For the care of those that do occur, however, every possible precaution has been taken to protect the victim.

The close of the present academic year marks the completion of the first five-year period of our neuropsychiatric service. From 1912 to 1934 cases falling within this special field of medicine were referred to the public and private mental hospitals in the city or state, or to one of our advisers specializing in the diseases of the mind and nervous system. The appointment of Dr. Earl H. Adams was made in 1934 because we realized that if we were to carry on an efficient, constructive health program this important phase of human experience must be carefully supervised by a specialist, as a member of our medical group. Studies throughout the country show that mental and nervous breakdowns are all too frequent; and indications are that the stress and strain of present world conditions, with their effect upon the social and economic life of our people, make for a constant increase in illnesses falling within the field of the neuropsychiatrist. During the past five years we have endeavored not to expand our responsibilities too rapidly in this highly specialized field. We have scrutinized our local cases, endeavoring to develop a program that would make it possible for us to bring about a solution of this problem with our present staff organization. There are few fields in the practice of medicine or surgery that require the long conference periods and the frequent sessions that cases of nervous and mental maladjustment demand. In a large institution like Columbia University we must expect to meet with cases of frank mental disease. The final disposition of these cases is always an intricate problem; but within a reasonable time with the help of the family, their physician, the University medical staff, hospitals and sanitariums, the cases are at last constructively and usually permanently cared for. Our primary and important responsibility is to have a health organization such that early in the College or University career of a student we may detect maladjustments or indications of submerged or latent mental disease. In this early recognition rests the only hope of saving the patient from the distressing and expensive experience for which he is destined in the near or distant future. During the past five years some four hundred cases have been under Dr. Adams's care, necessitating about twelve hundred consultations with patients, relatives, and others who could throw light on the cases. Many patients were referred to Vanderbilt Clinic, to the Psychiatric Institute, or to private sanitariums, for more or less extended treatment. The yearly load shows a large percentage of borderline cases; that is, cases where mental adjustment is decidedly inadequate, often approaching frank psychosis. The neuropsychiatric division of our health service is primarily interested in the problems of the undergraduates. Many of them are away from home protection for the first time, and must begin to assume adult attitudes and responsibilities. An undergraduate who is not well adjusted socially brings his troubles with him to college, and he needs individual help in finding an anchorage while he casts about for a safe course. Most adolescents attach themselves to some parental substitute; and it is the part of advisers, and in many cases of the medical department, to help them lay their courses wisely, seeking independence within a satisfying social environment. Personality difficulties are affected little, if at all, by academic education. The helpfulness of this division of the medical service depends at one point upon the interest and watchfulness of the Faculty Advisers. These officers are assigned to moderately small groups of students, giving them opportunity to know intimately each student. By the interested adviser the maladjusted student should be recognized early, and through him or the office of the Dean referred to the medical service for examination and treatment. The medical examinations of the entering students at Columbia and Barnard Colleges and the subsequent follow-up conferences uncover most of these problem cases. Occasionally, however, they are so completely submerged that they are not discovered until later in their College careers. During this past year we have had under supervision and treatment thirty-four of our Columbia College students. Since the psychiatric division is a branch of the medical service as are surgery, diseases of the nose and throat, eyes, and skin, patients no longer look upon this mental health service with apprehension. The problems of mental hygiene are as difficult of solution as they are numerous. Though the therapy of mental disease has advanced rapidly in the last three decades, much still remains to be accomplished in the field of maladjustments such as we meet in the late teens and in the early twenties. Again, as in previous reports, we express our regret that we cannot accomplish in a manner satisfactory to ourselves the results that this work demands, because of a lack of office space as well as staff members to care adequately for patients whose problems belong in this category of medicine. I wish to express my deep appreciation of the assistance rendered by the members of my Advisory Committee on Mental Health, Dr. Nolan D. C. Lewis, Director of the Psychiatric Institute, Dr. Robert B. McGraw, of Presbyterian Hospital, and also to Dr. Clarence O. Cheney, Director of the Westchester Division of the New York Hospital, and Dr. Irville H. McKinnon, of the Psychiatric Institute.

Under the efficient supervision of Dr. Gulielma F. Alsop the medical work at Barnard College has advanced most satisfactorily. Except for a mild epidemic of gastrointestinal influenza in midwinter the health of the Barnard community has been excellent. Respiratory infections were markedly decreased as compared with past years. Dr. Alsop reports that the splendid health record of the freshmen was doubtless due to the more adequate supervision of this group by an experienced adviser, who gave her full time to conferences with members of the group. This arrangement gave each student a chance to discuss with the adviser her personal problems and gave the nonmedical consultant opportunity, when necessary, to place a student under early medical supervision. Dr. Alsop held 1,653 medical conferences with the Barnard students. During the academic year, the Barnard medical office gave 5,500 treatments. To a group of 1,053 patients, 1,642 medical examinations were given. For both medical and nonmedical conferences the Barnard office records 9,545 visits. These figures do not include the conferences held in the evenings at the Residence Hall by the resident nurse, or by the Freshman Adviser, Miss McBride. In her report to the University Medical Officer, Dr. Alsop states that the emphasis of her work has been along the line of mental hygiene.

There would seem to be two separate and different needs presented by the problems of the women students; one, the need for help as freshmen in the adjustment to college life, and the other the need of the senior group for some reorientation to life beyond college, in some respects a reiteration of the advice that they were given as freshmen, but from a different angle. This point of view again emphasizes the importance of complete mental and emotional adjustment of the student to the real art of living. Health is dependent upon the proper functioning of all physical, mental, and neurological processes; diet, rest, exercise, and sunshine without intelligent adjustment to the emotional side of life cannot make for satisfaction and contentment. I wish to compliment Dr. Alsop upon the excellent health program that she is developing for our Barnard College women.

With the close of this year we have completed the health supervision of the tenth class entering Columbia College since the responsibility of the medical examinations was assumed by this department. It has been a decade of intense interest, as experience and plans have combined to develop our present setup for the clinical practice of preventive medicine. An effort has been made to eliminate from our program approaches that were found to be of little assistance in producing effective results in dealing with large groups. We have endeavored to build up our system of examinations and follow-up supervision with the individual as the center of our interest rather than the group as a whole. Data have been studied with the idea of making our approach to the health problems of the individual more accurate and effective. The theory of preventive medicine and the value of health supervision have long been accepted, but the practice has been slow to develop; so that as recently as ten years ago when the freshman health examinations were inaugurated at Columbia there was some difficulty in getting good clinicians interested in the project. Today there is a universal interest in health programs, not only among our college and university students, but also among the general public of our cities and rural districts. The physician now must be a health builder as well as an expert clinician in the treatment of acute and chronic diseases. The division of our medical service that has to do with the building up of individual health assets and the elimination, so far as possible, of tendencies that point toward future ill health, is not only of first importance, but is also a fascinating field. It is a phase of medical practice that not only calls for good judgment and mature clinical experience in diagnosis, but requires broad and sympathetic understanding in dealing with individuals that is not always like the approach to the difficulties of a patient suffering from acute disease. To create in the mind of the student an attitude toward health that will make it possible for him to study his own requirements as to rest, activity, and diet, and his disease tendencies, social maladjustments, etc., without developing in him an abnormal health consciousness and a habit of introspection, requires insight, a keen interest in the many problems of youth, and the ability to inspire confidence and a wholesome outlook in the student.

In the fall of 1929, 628 incoming students were examined. Of this number 229 were placed on our follow-up lists for future conferences or further study. This year, ten years later, 578 entering students were examined and, including upperclassmen, we have had 728 College students under medical supervision. Adding to this number students from other schools of the University gives a follow-up file of 780 individuals. Of these 780 students, 305 were members of the sophomore, junior, and senior classes, showing that we do not let the upperclassmen escape the privilege of health supervision offered by the College through the University medical service. The freshman medical examination uncovers most of the basic health needs of the student, but not all of the weaknesses that later come to the surface through the stress and strain of the academic program and outside activities. Faculty members realize more generally now than they did a few years ago that a student's difficulties in class may possibly arise from some physical cause. During the past year many cases have been referred to us by members of the College and University staff where failure in scholarship has been traced to disturbances in vision, defective speech, neurological symptoms, and maladjustments that at times presented questions not only of health but also of the wisdom of continuing training in professional fields for which a student was not well adapted, from the standpoint of health or other endowment.

Space does not permit the inclusion in this report of a complete record of our supervision program with a summary of what was done for each case. The summary shows that the 780 cases made 2,007 visits to the Medical Office, presenting 224 different medical and surgical problems. It is of interest that out of more than two thousand notices sent, only eight students failed to respond; a fairly good indication of the interest that these students have in the protection of their health and, we trust, an expression

of confidence in the supervision program. The urine examinations of this group of 780 men revealed only three cases showing the presence of sugar. A careful check on these cases proved them not to be diabetic. During the year six students were referred to this office because of speech defects. They all showed remediable conditions and were placed under treatment with satisfactory results. Seven students were referred for study from the slow readers' class of the College. Two were promptly helped by glasses. Five were referred to the Institute of Ophthalmology in the care of Dr. John Percival Macnie; they were found to have difficult refractive problems, were given iseikonic lenses, and continued under supervision. Last fall 543 paper-film X-rays of the lungs of the entering class were made. These films were carefully examined by Dr. Ross Golden, Professor of Radiology at the Medical Center, and members of his staff. For one reason or another twenty-five of these were considered unsatisfactory. Twentythree of these students reported to the Medical Center for stereoscopic films, one student had an X-ray made by his family physician, and one student withdrew from college before the new X-ray could be taken. All twenty-four second films showed normal lungs, giving us a clear record for the entering class on the score of pulmonary tuberculosis.

# REFRACTIVE EXAMINATION OF THE EYES

Refractive assistance not indicated												275
Refractive assistance indicated: advised to report if symptoms develop												32
Refractive assistance definitely advised												27
Present glasses satisfactory												152
Change of glasses indicated and advised												46
Change of glasses definitely advised .												8
Total												540

It is notable that careful refraction indicated no need for glasses in 275 students. In only a few cases where corrections were found necessary did we have difficulty in securing coöperation. In some cases slight refractive errors combined with moderate muscular imbalance were responsible for headaches, intestinal upsets, and poor scholarship. Dr. Raymond L. Pfeiffer, of the Institute of Ophthalmology, has been of great assistance to the University Medical Officer in the treatment of these cases.

#### SUPERVISION GROUP

Columbia Colleg	ge											
Class of 1939												69
Class of 1940												93
Class of 1941												143
Class of 1942												
Other schools of	the	: Ui	nive	ersit	y							5 <sup>2</sup>
Total												780

During the year the medical staff has worked in close coöperation with the Department of Physical Education. A member of the medical staff has been present at all competitive games to care for injuries that might occur and to pass judgment on the fitness of any participant if a health question arose. Reports from Dr. Dinegar and Dr. Manfredi show that in all of the athletic meets, exclusive of freshman and varsity football, only eighteen minor injuries occurred.

The responsibilities of the medical service in the work of the Department of Physical Education cover all divisions of its activities, but especially those activities grouped under section "C." In this group are all students who suffer from some physical handicap that makes it undesirable or unsafe for them to participate in the regular course in physical education. All members of group "C" may engage in exercises of a corrective type and may also play games that are especially adapted to their peculiar needs. Unfortunately it is impossible always to correct fully the physical defects in many of these students through any type of corrective exercise. Every effort has been made, however, by the medical staff and by instructors in the Department of Physical Education to bring about as complete an improvement as possible in those cases presenting postural defects, weakness and faulty muscular coördination due to paralysis, circulatory disturbances, etc., without neglecting the more important necessity of satisfying the normal desires, urges, and drives of these students that demand healthy expression. Frequently these physically handicapped students are thwarted or discouraged by their inability to meet the social urge that is normal for the boy in his teens and early twenties. It has been possible under constant medical supervision for the instructors to work out programs of recreational activities providing opportunities that satisfy these normal interests of the student, not found when the program is confined to the dull and tiresome corrective exercises that must always be individual, lacking the group stimulation of games and recreational activity. From the health standpoint we feel that the development of the work in group "C" has progressed favorably but that much remains to be done to bring this special branch of health supervision up to the point where we may feel that the work is perfectly satisfactory. The program that aims to accomplish the most for these handicapped students must not stop with the best we can do to correct or ameliorate their physical defects, but must include individual and group activities of a recreational nature for the development of happy mental attitudes and ease of social adjustment.

Another group of students that we supervise each year is the one that represents Columbia College in intercollegiate athletic sports. Most of this competition is strenuous. It goes without saying that no student who has not a sound physique should be admitted to membership on these teams. The medical staff has agreed upon certain physical standards that must be met by the candidate who wishes to be classed "A," which qualifies him for competition. We are keenly interested in having first-rate teams but are far more interested in the present and future good health of our Columbia boys than we are in team victories. The setup of the medical and functional tests that are given to all students who wish to enter competitive sports has been described in former reports. This year we have endeavored to improve our methods of giving these tests and to develop closer contacts between the members of our medical staff and the instructors in physical education. It is quite evident that unless there is team play between those who teach the technique of the games and those who supervise the health of the participants, both the games and the players suffer. Our records show that 492 men were in training for competitive sports; 350 of this group actually took part in scheduled games. The 492 men received during the year 550 medical examinations. Of the original 293 freshmen who received the rating of "B," permitting them to participate in the regularly prescribed courses in physical education for credit, 172 during the year were found by further medical examination to be qualified, because of improved physical condition, to receive the "A" rating and enter competitive fields.

During the year our responsibility for the employees of the University

has been extended. The men and women employed in the dormitory buildings and in the restaurants were given medical examinations, which are now required annually of all employees in these services. All those who showed conditions that might affect their health or might make them less physically able to do their jobs, have been kept under regular medical surveillance. When applicants for specific posts are checked for physical fitness, the medical examiner, with the interests of both the candidate and the University in mind, recommends only those who measure up to the health standards of eligibility. When, however, men and women in service report for their annual physical check-ups the examining physicians are on the alert for weaknesses or tendencies that can and should be treated in order to prolong the years of usefulness and service of the employee. Occasionally an employee develops a condition that contraindicates the type of work that he is doing. Under these circumstances a change is recommended to some other type of work that can be done without injury to the employee. This year 119 men and 162 women were examined for manual work; 321 men and 50 women as food handlers.

The children's play school, at 21 Claremont Avenue, carries on successfully. The Medical Officer made it possible for these children to receive medical inspection each morning. When the children have assembled at nine o'clock they are looked over by Dr. Mary Nelson. As a result, children with common colds and other communicable conditions are sent home for treatment before they become a menace to the group. Dr. Nelson's interest in this group has been of value also to officers of the play school and to parents who, as members of the staff, live in a University apartment house where community projects are possible. All of us who have been in touch with the play school, as well as the children themselves, are appreciative of Miss Crosby's sympathetic and skillful management of all the activities and of her wholehearted coöperation in matters of health.

This year the Campus Dental Hygiene Clinic gave 1,631 treatments to students and staff members, many of whom have expressed their appreciation of this prophylactic work. Many incipient conditions have been corrected by regular visits to this clinic. The clinic's presence on the Campus is a reminder of the importance of periodic dental examinations which are frequently postponed until the damage to the teeth and sur-

rounding tissue is irreparable. This is the clinic's twelfth year of service on the Campus under the direction of Professor Anna V. Hughes, of the Columbia School of Dental and Oral Surgery.

The telephone plays an especially important role in the daily routine of the medical service, bringing each day scores of calls, both local and long distance, for help of every description. No record of all of these calls can be kept because of the pressure of more important work. We find, however, that 69 calls required the immediate dispatch of a graduate nurse to care for a case of acute illness or to meet an emergency resulting from an accident. The visiting nurse made 237 calls to homes and hospitals during the year. Accidents occur at all times of the day and night on the University Campus. During the year we treated 1,009 accident cases. Of the 1,009 accidents, 151 occurred in the laboratories, 19 of the 151 being workmen's compensation cases. Sixty-four of these laboratory accidents were due to burns from chemicals or heat; 85 were due to lacerations, puncture wounds, and foreign bodies from glass, etc.

The tabulated material as presented in this report deals only with that phase of our service rendered on the Campus. There is, however, a division of our responsibility that takes the medical staff and our patients into the various hospitals of the city and its vicinity. We are particularly grateful for the courtesy extended to this department by St. Luke's Hospital, Presbyterian Hospital, Neurological Institute, Psychiatric Institute, Institute of Ophthalmology, Vanderbilt Clinic, Knickerbocker and New York hospitals. These and other hospitals have never failed to coöperate with us in dealing with people who seek help and relief from suffering. To these institutions we express our appreciation of their coöperation which has played a distinct part in the carrying on of a useful medical service at the University. And for the support and encouragement given us by our own Faculty and officers of administration we are deeply grateful.

Respectfully submitted,

WILLIAM H. McCastline, University Medical Officer

June 30, 1939

## INSTITUTE OF CANCER RESEARCH

ENDOWED BY GEORGE CROCKER

### REPORT OF THE DIRECTOR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

Sir:

I have the honor to submit the twenty-sixth annual report of the Institute of Cancer Research.

During the summer of 1938 the Institute of Cancer Research moved from the very plain brick building, originally constructed by the Trustees of Columbia University, at 116th Street and Amsterdam Avenue, to new quarters on the fifteenth and sixteenth floors at 630 West 168th Street. In addition to the library, laboratory scientific apparatus, some sixty thousand microscopic slides of tumors, and other paraphernalia of a research institute, thousands of albino mice and rats and a few guinea pigs and rabbits made the journey without any fatalities.

Among the animals so moved were a number of very valuable purebred strains of mice and rats, most of which were developed in the Institute by years of painstaking inbreeding of a brother-and-sister stock. One of the mouse strains domiciled in the Institute originated in the laboratory of the Curie Institute in Paris and has a valuable quality for cancer research in that a large number of spontaneous breast cancers develop in the older animals. The genetic history of this strain has been published in great detail by Dr. N. Dobrovolskaia-Zavadskaia, who developed it, the records covering a period equivalent to some thousands of years of human existence.

Purebred strains of rats have been available in past years only from the Wistar Institute in Philadelphia, where a huge breeding experiment has been carried on with measurements of the variability in growth, size, organ weights, and so forth recorded in detail. Workers in that institute find that even with prolonged interbreeding of this type fluctuations still occur which are not due to outside agencies. It takes fifteen generations to reach a homozygosis, as the geneticists term it, of 96 percent. At this point the strains will show frequent and considerable differences just as pure

cultures of bacteria show mutations. After thirty or forty generations, which correspond to about one thousand years in the human race, the animals show fewer physical variations and grafted tumors show fewer spontaneous cures. The various pure rat strains at the Institute of Cancer Research have been studied from two aspects: one, the possibility of their developing sarcoma in the liver after infestation with a tapeworm egg; the other, their acceptance or nonacceptance of a tumor graft and the conditions of the growth of that graft while in the animal. The strains have also been used for a large number of studies on the effects of the hormones on the growth of benign tumors and similar investigations in which a healthy and homozygous strain of known history is essential.

The advantage of working with pure or homozygous strains is that their complete life history is known and the frequency with which cancer occurs spontaneously in them has been determined over many years of observation, so that they can be used as a standard of unvarying material which will do a fairly definite thing under given conditions because no strange blood is ever allowed to enter such a strain. However, even with the years of care which have been devoted to keeping these strains segregated, slight fluctuations still occur spontaneously so that it is possible to develop subsidiary strains with slightly different characteristics from those of the main stem. These oscillations are very slight and do not interfere with the peculiar value of the purebred strains. Dame Nature seems to resent our efforts to change her way of never making two living things alike. Tumors produced in these strains by carcinogenic chemicals are far more stable in their biological qualities than the interbred animals in which they arise, for cancer is a new race of cells growing in a culture medium, the body of its host, and is transferred by grafting, so that its qualities are permanently retained, just as it is possible to graft on the stump of a crab apple tree a small slip which will forever bear large, red, Northern Spys. The animals in which the tumors grow reproduce by the union of ova and spermatozoa, and in this process disturbances in the gene relationships may appear spontaneously or from outside influences. X-ray, for example, is a potent agent in producing mutations in a pure strain of animals, but a tumor after repeated rayings always remains the same, as was shown years ago by Professor Prime.

The moving was completed by October 1, 1938, and since that time the

staff have been actively working on the various research problems which had occupied them before they were uprooted.

A number of interesting contributions have been made to the cancer problem during the year 1938-39, perhaps the most important being that of Kögl and Erxleben, who in a series of publications report that the amino acids which form the constituent molecules of the proteins in animal and human tumors differ from the amino acids of normal animal and human tissues in that some of these acids rotate the plane of polarization to the left instead of to the right. Many of the amino acids, but not all, are dextrorotatory in the proteins of normal tissues, while in tumor tissues a considerable proportion of these acids which normally rotate to the right may be more or less replaced by a levorotatory form. Upon this basis the authors have erected a considerable theoretical structure, pointing out that this change may explain the fundamental observation that tumor cells are not destroyed by the healthy tissues as are normal cells when they are displaced from their usual relationships in the organs. The idea which these two chemists brought forward is that the ferments of the scavenger cells of the body are unable to attack the unusual form of amino acid, hence such tumor cells would escape digestion. Such narrow specialization in ferment action has been used to separate the levorotatory constituent of a racemic mixture of glutamic and other acids.

Just how these differences in the amino acids may offer an explanation of the causation of tumors is still uncertain. Since Kögl's observations concerning the presence of levorotatory acids in the proteins of cancer instead of the usual dextrorotatory form have not been confirmed by other chemists checking his conclusions, it is certainly premature to assume that any definite step has as yet been made in the solution of the cancer problem. Nevertheless, should Kögl's work be confirmed, it would offer opportunity for a vast amount of investigative study directed along this line, for it is the first qualitative difference which has been discovered between the cancer cell and the normal cell. Hitherto the differences have been quantitative as, for example, that the tumor cell contains more water than the normal cell of the same type, that it usually digests sugars differently, and that its ferment content varies considerably on occasion from that of the normal cell. That fundamental differences exist is ren-

dered improbable by the fact that tumor cells injected into animals of the same strain do not excite any immunity, as they would if the proteins differed greatly in their composition. This important reaction is the basis for many of our diagnostic and therapeutic agencies. For example, the injection of proper quantities of dead typhoid bacilli will give to a human being a high immunity against the live typhoid organisms, and this is due to the fact that the protein of the typhoid bacillus differs greatly in its chemical structure from that of the human tissues.

The second interesting development comes from the clinical side in the treatment of advanced and inoperable cancer by the reduction of the body temperature. Quite striking effects, especially in the relief of pain, have been noted, but as yet there is no evidence that this procedure will in the near future displace the standard methods of curing cancer.

A third event was the celebration of the discovery of radium, x-rays, electrons, and electromagnetic or Hertzian waves during International Cancer Week, in Paris, in November, 1938. This meeting was attended by many eminent physicists, biologists, physicians, and other scientists interested in the discoveries which aided so greatly the diagnosis and treatment of cancer. While, as the years have passed, radium has become one of the important agents in the treatment of cancer, x-ray has contributed not only to treatment, but perhaps in an even greater degree to the diagnosis, not alone of cancer, but of many other internal diseases.

The meeting was opened by a reception in the great hall of the Sorbonne at which the ambassadors of many countries presented messages of good will and the President of France and the President of Poland delivered official addresses. The remainder of the week was occupied by series of papers on the most varied topics in physics and biology. A dramatic opening speech was made by Professor W. Bjerknes on the work of Hertz, the discoverer of the electromagnetic waves. Bjerknes, who had the good fortune to be associated with Hertz as his first pupil from 1890 to 1891 in his then newly organized laboratory at the University of Bonn, held in his hand the original notes made by Hertz for his famous memoir on the generation of electrodynamic waves in free space and their reflection and refraction.

Professor William H. Woglom, in collaboration with Mr. Joel Warren, has continued the investigation of the filterable agent mentioned in last

year's report. It was surmised from the first that this was but a chance contaminant of rat sarcoma 39, in which it was encountered, and so it proved to be, for rats injected with it developed no tumors after the lapse of a year. The agent finally turned out to be a pleuropneumonia-like organism belonging to the L group, of great interest to the bacteriologist but quite without significance for malignant disease, and the investigation was accordingly abandoned after the final result had been published.

With Mr. Warren Professor Woglom has shown that exposure to ultraviolet light will destroy the power of the Shope rabbit papilloma virus to elicit tumors, but not its power to immunize against this growth. A description of these experiments is now in press.

Despite innumerable attempts to transfer mouse and rat neoplasms by filtered extracts, that is to say by preparations which do not contain living cells, success has not been achieved. The fact that tumor 180 and two other mouse sarcomas could be transmitted also by lymph nodes from mice that had borne these growths for but five days suggests the presence of a filterable agent. Professor Woglom, however, has an investigation under way, the results of which will soon be ready for publication, showing that metastatic cells from one of the tumors mentioned may be present in the lymph nodes as early as the seventh day. Since it is these tumor cells which are responsible for the sarcomas that arise from inoculated lymph nodes, the assumption of a filterable agent becomes superfluous.

Professor Woglom has also in progress an experiment on the effect of certain endocrine glands upon carcinogenesis and, in collaboration with Dr. Milton J. Eisen, is investigating a transplantable thymic tumor of the mouse in an endeavor to find out what relation it bears, if any, to lymphatic leukemia. Other work with Dr. Eisen, concerning the question whether carcinogenic agents are entirely local in their effects, or constitutional as well, have not progressed far enough to warrant discussion at the present time.

One of the purposes of the experiments carried on during the past three years in the Institute's high-voltage laboratory was to measure the output of an x-ray generator running at voltages from 200 to 1,000 kv., and also to measure the amount of penetration and scattering of these rays under conditions similar to those occurring in clinical treatment. One difficulty in carrying out this work lies in the fact that the physical dosimeters ordi-

narily used for this purpose do not record correctly the intensity of high-voltage radiation in standard roentgens. To escape this dilemma Professor Charles Packard and Mr. Frank M. Exner have used the biological method of measurement developed in this laboratory by Professor Packard and now widely employed throughout the world. This makes use of the eggs of the fruit fly, Drosophila. It is capable of furnishing data which serve as a basis for calculating therapeutic dosage. In the past year these data have greatly increased in number. Since, however, the method is not convenient for routine use in the hands of unskilled technicians, Professor Packard and Mr. Exner have made several series of comparative measurements between the dosimeter and the eggs so as to enable clinicians with commercial dosimeters to estimate the biologically effective dose under their exposure conditions. It is found, for example, that at 900 kv. the dosimeter dose must be increased by about 20 percent over that at 200 kv. in order to obtain equal quantitative effects on the eggs.

A complete corroboration of this result will be presented at the Third International Cancer Congress by Dr. Robert S. Stone, of the University of California, that to obtain equal erythema reaction on the human skin the dose of 1,000 kv. x-rays, as measured by the dosimeter, must be increased by nearly 25 percent over the dose at 200 kv.

These conclusions relate to measurements in free air and on the skin. But tests with the fly eggs have further shown that at a depth below the surface approximately the same differences are found. Thus it is now possible for the radiologist to adjust his dosage of low- and high-voltage rays so as to produce equal effects either at the surface or at a depth within the body.

As long as twenty years ago the view was expressed by Professor Wood that the essential factor determining the biological effects produced by ionizing radiations such as x-rays is the amount of ionization produced per unit volume of cell substance. Differences in effect resulting from the fact that the size and concentration of the individual ion tracks differ somewhat between low- and high-voltage x-rays have never been satisfactorily proved.

The established advantage of roentgen radiation, therefore, at voltages ranging from 400,000 to 1,000,000 instead of the 200,000 now largely used in deep tumor therapy is not in any difference in specific action but in the

better depth dose or penetration of the body by the radiation, accompanied by less damage to the skin. In other words, a unit of x-ray acting on a cell suspended in air so as to avoid all scattering, and this is the condition under which the fly eggs are exposed, is the same for all voltages, and at the present time the burden of proof rests upon the person who dissents from this statement. The thousands of observations which have been made in the Institute in the past twenty years have shown such complete agreement as far as x-ray and radium are concerned that this fact must be considered definitely proved. On the other hand, the physical distribution of the radiation in the tissues gives rise apparently to different effects. If the x-ray beam at 200,000 and 1,000,000 volts is measured in air by the use of the Drosophila eggs and then an exposure is made on a patient's skin at an equal rate with the two beams, an erythema reaction of the skin will be produced at 200,000 volts but not at 1,000,000 volts. The reason for this is that at 200,000 volts about 40 percent of the energy of the impinging beam is reflected back to the skin, whereas at 1,000,000 volts less than 5 percent is reflected back against the skin. Hence at the lower voltage the skin receives at least 35 percent more radiation than at 1,000,000 volts and, as has been stated above, Dr. Robert S. Stone demonstrated by raying human beings the fact which was first estimated with accuracy by the use of the eggs of the fruit fly, Drosophila. In addition to these practical radiological problems a number of other questions of practical and theoretical interest have been under investigation with the Sloan x-ray generator.

The nature of the processes involved between the exposure of living material to x-rays and the appearance of visible injury is still obscure. A better understanding of the mechanisms of radiation effects should throw light on the mode of action of other agents, such as heat and drugs. The inactivation of viruses by radiation seems to offer a favorable point of attack on this problem, since this process shows some of the characteristics of biological injury but is free from many complicating factors which are usually present. The data obtained are therefore favorable for attempts at the theoretical interpretation.

The study of the action of x-rays on tobacco mosaic virus has been continued this year in collaboration with Professor John W. Gowen, of the Department of Genetics of Iowa State College. The comparison of the

effect of high- and low-voltage x-rays led to unexpected results, which call for further study. This work is to be reported by Professor Gowen at the Third International Cancer Congress at Atlantic City, in September, 1939.

By the use of x-rays it is possible to influence, and hence to analyze, various processes of fundamental biological interest which may prove to be basic to the general problem of malignancy, such as fertilization, organization, growth, regeneration, and recovery from injury. Studies along these lines have been started by Professor Packard and Mr. Exner. Of special interest is some work in collaboration with Professor Roberts Rugh, of New York University, who has been engaged in studying these problems in the frog, a very favorable material for the studies.

Members of three other departments of the Medical School have availed themselves of the facilities of the high-voltage laboratory. Professor Severinghaus, of the Department of Anatomy, and Dr. Darby, of the Department of Biological Chemistry, wished to destroy or modify the secretions of certain glands in conditions where surgical removal was not applicable. Some progress has been made in an attempt to do this by using very narrow pencils of x-rays only a few millimeters in diameter, which affect the gland with a minimum of injury to the animal. Professor Hopkins, of the Department of Dermatology, is interested in producing a considerable reduction of the leukocytes of the blood in animals in connection with certain experiments on infection. This could be done more advantageously in the Institute's laboratory than with one of the clinical machines of the Department of Radiology. A number of other lines of x-ray experimentation are under discussion with members of other departments.

An important feature of the high-voltage installation of the Institute has perhaps not been sufficiently emphasized. First, this apparatus is unique in the absolute consistency of its radiation output and in the ease with which desired quantities can be reproduced day after day without the necessity of troublesome measurements. At the lower voltages, for example, by restriction of the filtration an enormous output of radiation can be obtained amounting to 100,000 r units or more per hour. Secondly, it was specially designed to permit a far wider choice of exposure conditions to meet particular experimental requirements than can be obtained from other existing installations, which have been built primarily for treat-

ing patients. For instance, the x-ray escapes from five widely separated openings closely guarded by thick layers of lead, and by proper choice of conditions of filtration, etc., each portal may yield a different quality and quantity of radiation so that five experiments can be carried on at the same time. Other facilities for experimental work now on hand in the laboratory as a result of over twenty years of experience in x-ray experimentation in the Institute of Cancer Research constitute a valuable asset which would be difficult to duplicate outside a large university physics department.

It has been possible to carry on these more recent researches only because of a very generous grant from the John and Mary R. Markle Foundation.

During the year fifty-five carefully selected patients have been treated by Dr. Friedrich Burgheim with the x-ray apparatus mentioned above. The machine proved very satisfactory from an operating aspect, as only one day was lost out of the year owing to a slight breakdown in connections. Since five patients can be treated at once, it has cost relatively less for construction than five commercial 400 kv. machines and its upkeep expense under full working conditions is no more than that of such a group of 400 kv. machines. The chief expense is in the electrical engineering staff which is necessary in order to run the apparatus and make repairs, for as this is not a commercial machine new parts have to be constructed if a breakdown occurs. The number of patients treated may seem small, but since many of them were radiated at least fifty minutes daily for two or three months, it is evident that only a moderate number could be treated and not interfere with the research work which must be carried on at the same time. The only patients cared for were those who were inoperable, and some of them had been treated before with x-ray and radium without success.

It is obvious that as yet no estimate can be made of the value of such treatments since sufficient time has not elapsed to permit of any final conclusions. However, some patients have done extremely well. The most striking difference between radiation at 700,000 to 900,000 volts and the ordinarily used radiation of 200,000 volts is that there is an astonishing lack of reaction of the skin and mucous membranes with the former. In other words, it has been found possible to administer very large quantities

of such short wave-length radiation without causing the serious injuries which are frequently seen after 200,000 volt treatments. It should be understood that the radiations are given very slowly, most of the patients being treated for fifty minutes while receiving a dosage of only 200 r units. This is the standard Coutard type of radiation therapy, the rate not exceeding 4 r per minute. Other workers with high-voltage x-rays had given very large doses at a much more rapid rate and noticed serious damage to the skin and in some instances excessive injury to the deeper healthy tissues. The purpose of raying at a very slow rate is to permit recovery of the healthy tissues while the malignant structures are being damaged. If the cancer under treatment is sufficiently radiosensitive and not too extensive it may be possible to destroy it.

In the course of the experimental studies of Professor Packard and Mr. Exner an immediate explanation was found for this lack of injury to the skin, for when the x-rays were measured at the surface of the skin with 200,000 volts it was discovered that an additional dose of over 40 percent was present in the skin due to the scattering back against that tissue of the x-rays from the deeper tissues. At 700,000 volts, on the other hand, this back-scatter amounted to little more than 5 percent. Thus the skin treated at the higher voltage received a smaller dose and hence was less damaged. Also, if the rate of giving was increased so that much larger amounts of x-ray were projected into the tissues, it was found that serious x-ray sickness occurred which made the patients very uncomfortable, whereas at 700,000 or 800,000 volts they were much more comfortable than with 200,000. Whether the varying effects on the patients of high and low voltages are due to some difference in the type of injury of the normal vascular and connective tissue structures and of the tumor or to the low rate at which the x-ray is administered, or, again, to the fact that the lateral scatter is less and hence a smaller volume of tissue is rayed, cannot at present be definitely decided.

A number of the patients treated have remained without evidence of a neoplasm, and favorable results were obtained even in patients with extensive metastases in different parts of the body. Especially favorable results were seen in some individuals with advanced carcinoma of the bladder and in extensive pelvic recurrences after radium therapy for cancer of the cervix uteri. In conditions like Hodgkin's disease and in

some cases of advanced cancer good results were noted by irradiating a large part of the body at one time, using, of course, very small dosage at a skin focus distance of about 150 cm. It is interesting to note that the anemia which has been reported after the administration of such largearea treatments with 200,000 volts was not found with this higher voltage radiation, probably because of the slow rate of administration of the rays. These studies on cancer in human beings have confirmed the observation made by the staff of the Institute using biological material to measure dosage and back-scatter and suggest, as has been stated elsewhere, that there are considerable advantages for certain types of cancer in the use of 600,000- or 700,000-volt x-ray, but it has also become obvious that such benefits are limited to a few types of internal cancer, while all superficial cancers can be treated and a great deal of palliative treatment, which is one of the valuable features of x-ray, can be equally well accomplished with apparatus whose upper limit is 200 kv. and can be handled in a physician's office by one who is not specially trained in electrical engineering. The use of these very high voltages will undoubtedly be confined to a few centers since cancer patients are generally transportable without special risk, and by proper selection of patients the expensive high-voltage treatments can be limited to those to whom the greater penetration and other factors are absolutely essential.

Various drugs which have been highly recommended for the prevention of radiation sickness were tried during the year, but it was found that while they were efficient in some patients, in others they had no effect.

Drs. Maynie R. Curtis and Wilhelmina F. Dunning have continued their studies of the etiology of *Cysticercus* sarcoma of the rat's liver. Their previous studies have shown that a potent carcinogen must in some manner be associated with living taenia larvae. Any rat which harbors a single one of these living parasites in its liver or subcutaneous tissues may ultimately die of a rapidly fatal malignant tumor. The more parasites the rat has, the more certain its death from malignant disease and the sooner, on the average, will it occur. The adult stage of this parasite, the common tapeworm of the cat, on the other hand, exerts no carcinogenic action on its host.

Considerable effort has been made to grow and prepare for chemical

analyses large quantities of taenia larvae. With the coöperation of Professor R. J. Anderson, Professor of Chemistry at Yale University, an attempt is being made to isolate and determine the chemical composition of the active agent. Sufficient material has been obtained, to date, to show that the chemical composition of *Cysticercus fasciolaris* is in many respects unusual. The report of Professors Salisbury and Anderson, to appear in the August, 1939, *Journal of Biological Chemistry*, gives a fairly complete analysis of the lipid constituents, particularly the phosphatide fractions and some of the water-soluble compounds. The larvae were found to contain practically no reducing sugar but a high percentage of glycogen and sufficient sodium and potassium to give the ash and aqueous extracts a strong alkaline reaction.

A method of simulating Cysticercus cysts by the injection of nodules of paraffin containing known quantities of synthetic carcinogenic chemicals was suggested by Professor F. C. Wood and has proved to be a very effective and economical method of inducing tumors in rats and mice. By this method tests for carcinogenic properties have been made on several fractions derived from the dried larvae. Cholesterol, crude fat (both acetone and alcohol-ether extractions), cerebrosides, polysaccharides, and phosphatides have been injected in about five hundred rats and all have thus far given negative results. The reaction about the phosphatide fraction was suggestive of the reaction produced by benzpyrene. One rat after a year showed active connective tissue reaction and bone formation at the site of injection in the subcutaneous tissues. Drs. Dunning and Curtis have found that dilute concentrations of benzpyrene produce bone and osteogenic sarcomata in the subcutaneous tissues of rats, and hence they are testing this phosphatide fraction further in the same and in higher concentrations.

Parasitologists have reported that rats susceptible to *Cysticercus* disease can be artificially immunized with injections of extracts of whole fresh larvae or dried taenia. Five protein fractions derived from the dried larvae are being tested for their immunological properties on a series of about three hundred rats which are genetically susceptible to infestation by the parasite. Some of the proteins have given an immunity to the growth of the worm in the liver. It has been found that the age of the rat plays a dominant role in the natural and artificially induced immunity of the

rat to the parasite. Dr. Eisen is attempting to determine the effect of castration of the host on the natural immunity which develops coincidentally with sexual maturity.

A study was made by Drs. Curtis and Dunning of the effect of the age of the rat when infested on the occurrence of neoplastic changes in the walls of *Cysticercus* cysts. Data were available on 12,767 rats which had been infested for at least eight months, the minimum period for the occurrence of a tumor. The immunity which appears to this parasite in the older rats limited the practicable variation in the age infested to four monthly age groups and further produced between these groups a progressive reduction in both the proportion of rats fed taenia eggs which were infested and in the numbers of parasites in the livers of the infested rats. The 12,767 infested rats had 128,294 *Cysticercus* cysts which were distributed respectively among the hosts infested at one, two, three, and four months of age, as follows: 83,230; 35,140; 8,185; and 1,739.

In each of the four age groups an increase in the monthly deaths from sarcoma corresponded to an increase in the age of the parasites or the number of parasites in the livers of the infested rats. Among rats with an equal infestation, the monthly deaths from *Cysticercus* sarcoma did not vary with the age of the rat when it was infested. Further, among rats dead with *Cysticercus* sarcoma with an equal degree of infestation, the average period from infestation to death was the same for rats infested at one, two, three, and four months of age. It can, therefore, be concluded that the occurrence of *Cysticercus* sarcoma is independent of the age of the rat when infested.

Drs. Curtis and Dunning have nearly completed taking the data for a study of the genetic susceptibility of rats of two inbred strains to two simultaneously transplanted sarcomata. These two tumors—Benzpyrene 839, a subcutaneous fibrosarcoma induced by 3:4-benzpyrene, and IRS 6820, a *Cysticercus* plasmoma—arose simultaneously in the same rat which was of the August-Copenhagen strain. Practically all the rats of this strain are susceptible to both tumors, and data have now been taken on 350  $F_1$  and about 1,000  $F_2$  and backcrossed hybrids derived from crosses between rats of this susceptible strain and the Zimmerman strain which is resistant to both tumors. The  $F_1$  hybrids are susceptible to both tumors and the data on the  $F_2$  population will show whether or not genetic sus-

ceptibilities to the two tumors induced by different agents in the same host can segregate independently. In addition about one hundred young and adult male and female rats of the August-Copenhagen cross were castrated by Dr. Eisen to determine the effect of castration on the growth of these tumors.

It may be added, incidentally, that this highly malignant transplantable tumor arising in the liver of a rat from the incitation of some chemical product of an intestinal parasite has no exact parallel in human pathology. The only known human plasma cell tumor arises in the bone marrow as a myeloma. The extramedullary types in man are, as a rule, benign processes without distinct neoplastic properties.

Drs. Dunning and Curtis have completed an analysis of the occurrence of 2,753 tumors induced at the site of injection into the subcutaneous tissues by different concentrations of 3:4-benzpyrene in paraffin wax injected in foci of .2, .1, and .05 c.c. volume. In a previous experiment they had shown that in rats injected with foci of equal volume and concentrations of chemical the number of foci or the dose of the chemical determined the average time at which the malignant change occurred and the probability of its occurrence. In these experiments the amount of the carcinogen and the surface area of the tissue exposed were varied coincidentally, and the purpose of the present experiment was to separate these two factors and determine their relative effectiveness. The dose was varied from .2 to 24 mg. per rat and injected in three concentrations, namely, 1, .25, and .1 percent. Following the injection the paraffin containing the benzpyrene solidified in fairly uniform, elliptical nodules, the surface area of which varied from approximately 186 sq. mm. for foci of .2 c.c. volume through 146 sq. mm. for foci of .1 c.c. volume to 103 sq. mm. for the foci of .05 c.c. volume. Two milligrams of benzpyrene was injected in one focus of .2 c.c. volume, in two foci of .1 c.c. or four foci of .05 c.c., and likewise 4 mg. were distributed in two, four, or eight foci.

Of the rats injected with 1 percent benzpyrene 1,375 survived for sixty days and 1,064 developed tumors. Tumors were observed in 80 percent of the rats with foci of .2 c.c. volume, in 77 percent of those with foci of .1 c.c. volume, and in 70 percent of the rats with foci of .05 c.c. volume. An increase of approximately 400 sq. mm. in the surface area of the tissue exposed to 4 mg. of benzpyrene, effected by increasing the number of foci

in which it was injected, failed to increase the percentage of rats in which tumors were induced. Among the rats injected with .25 percent benzpyrene 60 percent developed tumors, while less than 30 percent of those injected with .1 percent benzpyrene had induced tumors.

When the same surface area of tissue was exposed at foci of equal volume containing varying quantities of benzpyrene, the weaker concentrations induced tumors in a smaller percentage of the injected rats and induced the tumors in an increasingly variable and longer average time. This would suggest that the probability of the occurrence of malignant disease and the time necessary to induce it were determined by the extent of some specific injury to the cells. A paper embodying the above results, entitled "Volume of Injection and Concentration of Carcinogenic Chemical as Factors in the Initiation of the Malignant Process and Their Bearing on the Somatic Mutation Hypothesis," has been prepared for presentation at the Third International Cancer Congress at Atlantic City, September 11, 1939.

Drs. Dunning and Curtis also prepared for presentation at the Seventh International Genetics Congress in Edinburgh, August 26, 1939, a paper entitled "Host Constitution and the Incidence of Chemically Induced Tumors." They presented the results of their study on the relation between the surface area of tissue exposed to a given quantity of carcinogenic chemical and differences in host constitution. This study of the incidence of tumors in discrete foci of 1 percent benzpyrene failed to show any consistent difference in the percentage of tumors induced, in the average time of their occurrence, or in the proportion of deaths from induced tumors in a given sixty-day period which could be attributed to differences in the host's constitution, when rats of both sexes of a wide variety of ages and of different genetic constitutions were injected with similar doses of benzpyrene and were compared for the same quantity of benzpyrene injected in foci of different volumes. If the response to the chemical incitant had been affected by any constituent of the cell which varied with the age, sex, or strain of the host, progressive differences would have been expected with an increase in the surface area of the host's tissue exposed to a given dose of the chemical.

Differences in the concentration of the chemical were found to modify significantly the number of tumors induced, and a reduction in the con-

centration of the chemical decreased the percentage of tumors induced and significantly increased the average period from injection to observation of the tumors, while an increase in the surface area of the tissue exposed to a given dose of the chemical failed to enhance the differences between hosts of different constitution. These results would seem to indicate that observed genetic differences in the occurrence of spontaneous tumors are due to variations in the production or in the distribution of different quantities or concentrations of incitants rather than to differences in cell constitution.

During the year Drs. Dunning and Curtis have injected about six hundred rats and mice with a colorless, highly refined 1:2:5:6-dibenzanthracene product. Tumors are appearing more rapidly than with the commercial impure product, but further observations on the occurrence of tumors will be necessary to determine whether the prolonged period previously observed for the occurrence of dibenzanthracene tumors was due to the nature of the chemical or to a reduction in the concentration of the active principle by the inclusion of inactive hydrocarbons.

Drs. Dunning and Curtis presented at the Genetics Section of the meeting of the American Association for the Advancement of Science, in Richmond, December 27, 1938, a demonstration of the linkage between a pathological condition (thrombosed varix) of the rat's liver and the pink-eyed dilute coat-color gene.

Drs. Dunning, Eisen, and Curtis are making a study of the morphology of about one thousand tumors induced by methylcholanthrene and Drs. Dunning and Curtis are coöperating with Dr. Carl Reich, hematologist at Lenox Hill Hospital, in a study of the changes in the morphology of the blood in hybrid mice derived from a cross between A-K, a high leukemic strain obtained from Dr. Jacob Furth, of Cornell University, and the high breast-tumor strain R III obtained from Dr. Dobrovolskaia-Zavadskaia, of Paris.

Another phase in the study of hormonal activities is to use a slow-growing, benign, transplantable breast fibro-adenoma as an indicator. For more than a year the effect of male sex hormone has been studied by Dr. Jacob Heiman on a series of rats bearing such a tumor arising spontaneously in the breast of an old female. Normal and castrated animals were inoculated. In normal and castrated females after prolonged

injection of the male sex hormone, testosterone propionate, the transplanted fibro-adenoma did not grow. If smaller doses were injected for a brief period and then the injections were stopped, the transplanted tumor would grow in about 25 percent of the normal females, after a protracted latent period during which no injections were given.

It is known that the male sex hormone produces hyperplasia in normal fallopian tubes, mammary glands, and nipples. However, it seems to retard or inhibit the growth of heterosexual tumor tissue transplants. Even after cessation of the injections in female castrates no tumors appeared. During the period of injections no tumors grew in normal males. It appears as though the enhancement of the male component further retards transplanted growths in this series. After small doses for a short period, followed by an interval of rest for three months, the tumor grew in 35 percent of the inoculated normal males, which is about the average occurring in normal uninjected males.

The normal rate of transplanted tumor growth in castrated, uninjected males is about 54 percent. During the period of male sex hormone injections no tumors grew in male castrates. After three to six months with no further injections and after a prolonged latent period the tumor grew in 32 percent of the inoculated male castrates.

The male sex hormone injections do not seem to retard the progress of a rapidly growing sarcoma in normal males or castrated females. However, in one series the growth incidence of the tumor in normal female rats injected with male sex hormone was reduced to 25 percent, while in the controls the growth incidence was 100 percent.

The unexplained increase in the growth of benign, transplanted fibroadenomata in male castrates led to a further study of the pituitary and adrenals in this group. A series of experiments is being carried on by implantation into normal and castrated tumor-inoculated rats of adrenal or pituitary glands removed from tumor-free castrates. This work is necessarily slow since age groups and post-castration time intervals must be taken into consideration.

Dr. Helen Heiman has carried on detailed studies of the Flexner-Jobling rat carcinoma in various sex and age groups after the injection of male or female sex hormones in ninety-six tumor-inoculated animals. Since hormone studies have been in progress on benign tumors in rats, it was thought advisable to inaugurate similar studies on malignant epithelial tumors.

The animals were divided into different age and sex groups after tumor (FRC) inoculation and were observed following injection of male sex or female sex hormones. Some of the injections were given concomitantly with tumor inoculation and others at different time intervals following the onset of tumor growth. Observations are in progress on the number of takes, recessions, morphologic changes, the rate of fibrosis and necrosis and other pathologic changes occurring in the injected as compared with the uninjected groups. The influence of injections of the heterosexual hormone on malignant tumors is being studied as compared with the effects of injecting the homosexual hormone.

In a series of twelve adult female rabbits crystalline female sex hormone was introduced subcutaneously following a series of tar painting of one group, and implantation of Shope virus tumor in another group. These studies are still in progress.

The chemical investigations of the constitution and detailed structure of the male and female sex hormones during the past twenty-five years have resulted in an extraordinary series of discoveries which have of late permitted the synthesis of these substances and many closely related compounds. Some of these do not occur in the body but still have powerful effects on the tissues of the sexual organs, the full scope of which is not known. One phase is to determine whether the injection of these substances can induce malignant tumors in animals not usually subject to this disease.

In the pursuit of this possibility Dr. Milton J. Eisen has treated female and male rats of various inbred strains with large doses of the female sex hormone, estrogen, dissolved in oil or in crystalline form. Cancer of the breast is exceedingly rare in rats. Treatment was begun at the age of two to four weeks. No tumors have as yet been observed in a group of eighteen animals injected subcutaneously with 50 gammas of estradiol benzoate three times weekly for varying periods up to fifty weeks, nor did neoplasia occur in twelve animals receiving in addition 25 rat units of anterior pituitary sex hormone. The gonadotropic hormone was added in an attempt to stimulate production by the animals of endogenous ovarian hormone. Combined injections were tolerated poorly. The longest sur-

vival time was thirty weeks, whereas only six of eighteen rats receiving estrogen alone died in this period. Males treated with both hormones showed the curious dilatation of the inguinal ring and edema of the scrotal sac already described in mice. The hyperplastic changes in the breast, female genitalia, and accessory genital tissues of the male, especially the seminal vesicles, in both groups were comparable, as were the alterations in the pituitary glands. Hypophyseal changes were first observed in animals dying after twelve to sixteen weeks. Soft, enormously enlarged pituitary glands consisting predominantly of chromophobe cells were observed in all male and female rats dying later in the course of injections. Fragments of one extensively involved pituitary failed to grow after subcutaneous implantation in rats of the same strain, showing that no malignant alteration had occurred in the cells. The advances in science, it will be noted, have forced the inclusion of the pituitary and adrenal glands in the group of sexual organs. Gonadotropic hormone alone was injected in eight rats, and no significant changes were observed in five surviving animals after fifty weeks.

Twelve rats received 500 gammas of estradiol dipropionate twice weekly. Extensive mammary hyperplasia resulted, but no tumors have been observed in seven animals surviving after thirty-five weeks, despite injection of a total dose of 34 mg. of the hormone. Pituitary changes were similar in this group, although stunting of body growth was more pronounced with larger doses of estrogen.

No tumors have developed in twenty-four rats receiving a single subcutaneous implantation of 1 mg. of crystalline estradiol benzoate or dipropionate that survived as long as thirty-five weeks. Neoplasia has not occurred in thirty-one female rats observed now for twelve weeks after implantation of massive doses varying from 3 to 6 mg. of crystalline estradiol dipropionate. Continuous estrus is present in these animals as shown by vaginal smears. Breast changes, as yet limited to hyperplasia, have been studied by periodic biopsies.

Attempts have been made to induce breast neoplasia in female rats three to six months of age by estrogen stimulation of subcutaneous or intramuscular autotransplants of mammary tissue in the back and femoral region respectively. Of eleven animals eight were lactating when treatment was instituted. No tumors have been observed in rats receiving

50 gammas of estradiol benzoate daily for twenty-eight weeks, then three times weekly for fourteen weeks, or thirty-two to thirty-four weeks after implantation of 1 to 3 mg. of the crystalline hormone.

Dr. Eisen has also been conducting observations on the growth of a transplantable adenocarcinoma of the rat breast, tumor R 2426, which arose spontaneously in a female rat of the twenty-seventh brother-by-sister generation of line 7322 of the August strain bred by Drs. Curtis and Dunning. This relatively slow-growing cancer is now in its fifth generation and has been successfully transplanted in 100 percent of inbred animals of lines 7322 and 28807. The latter arose in a half-brother-and-sister mating of line 7322. Tumor growth is equally successful after intraperitoneal, intraocular, or intravenous injections of neoplastic tissue. The lung nodules which develop after intravenous injection show a frank papillary structure totally absent in tumors in other locations. Experiments are now in course to determine whether this papillary structure is maintained after subcutaneous implantations of lung growths. The tumor does not induce concomitant immunity. Observations on the growth of transplanted tumors in homozygous animal stocks indicate two important facts: the regularity of tumor growth in animals of a uniform genetic constitution and the absence of tumor immunity. Older observations on immunity based on tumor growth in heterozygous stocks recorded reactions to cells of alien strains, whether this be tumor, embryo skin, or other tissue, and not specific antitumoral effects.

Subcutaneous implants of tumor R 2426 failed to produce tumors in animals of alien inbred strains, nor was it possible to graft the tumor in the anterior chamber of the eye of rats of unrelated strains. Similarly intraocular transplants in rats of alien strains have also been unsuccessful in the case of a highly malignant *Cysticercus* plasmoma (IRS 6820) which originated in the liver of a cross between two strains, the August and the Copenhagen.

Studies are now being made on the radiosensitivity of R 2426 in vitro and in vivo. A complementary series of studies is in progress utilizing a transplantable mammary cancer in the R III strain of mice of Dr. Dobrovolskaia-Zavadskaia mentioned above. It is certain that homozygous strains may afford more complete information on the method of radiation destruction of neoplastic tissue and the requisite doses. Tumors in

R III showed conspicuous regressive changes one week after the administration of 1500 r. The growths recurred, however, if incompletely excised at this time, and transplants of fragments in other mice produced tumors. If permitted to remain *in situ*, the tumors continued to grow following an original period of diminution in size. This is quite different from what occurs when animals of mixed genetic constitution are employed in studying the lethal effects of radiation.

Previous observations of Drs. Dunning, Curtis, and Bullock indicated that benzpyrene injected subcutaneously in paraffin was capable of eliciting a small number of breast cancers in rats. Varying degrees of breast hyperplasia have been observed in tissues surrounding benzpyrene nodules or sarcomata. Dr. Eisen has confirmed Cook's discovery of the estrogenic activity of benzpyrene. Estrus occurred in castrated adult rats ninety-six hours after intraperitoneal injections of 60 to 100 mg. of the hydrocarbon dissolved in sesame oil. No estrogenic activity was induced by 8 to 25 mg. of benzpyrene in noncastrated immature rats three weeks of age. The large quantities of hydrocarbon required for full estrus make it appear unlikely that mammary stimulation produced by benzpyrene is comparable to the action of female sex hormone. The effect is probably the result of a direct irritative action. Experiments in collaboration with Professor Woglom are being conducted to observe the local and constitutional effects of the carcinogenic agent in combination with other irritative and proliferative phenomena.

One of the phases of cancer research has to do with the growth of human and animal tissue in artificial culture media in order to study the detailed biology of the cell freed from all effects of the body as a whole. Obviously, success or failure depends upon the possibility of producing a medium in which the tissue cells grow in an approximately normal manner. Hitherto most of the media employed for this purpose have been blood plasma, either human or animal, or mixtures of various blood plasmas, together with the addition of an extract obtained by grinding the tissues of unhatched chickens or unborn mice or rats. The juice so obtained is added, after filtering, in carefully measured quantities to the culture medium. One of the curious aspects of investigations along these lines was to find some thirty years ago that human and animal tissues will often grow extremely well in plasma from an alien species, whereas it is

impossible to grow either normal tissues or tumors in an animal except within strict limitations of species and often even of strains. This is due to the fact that in culture media the blood plasma is simply a food and the fibrin in the clot a supporting medium which permits a certain amount of circulation of feeding material, while in the animal the growth of the tissue incites protective reactions which rapidly destroy the growing cells. None of the media hitherto devised have been wholly satisfactory, tumor tissue, especially, often growing poorly and dying after a few weeks or months despite every effort.

Dr. Johannes P. M. Vogelaar has, therefore, for many years been working on a simplification of tissue-culture technic, using a type of sterile plasma which is easily obtainable in large quantities and can be kept for months in perfect condition under proper refrigeration. For this purpose, obviously, beef plasma is most convenient and large quantities of a standard culture medium can be prepared from such plasma after the addition of certain highly purified substances, so that it is unnecessary to use embryo extract, the exact composition of which varies considerably. The great advantages of a standard medium of this sort lie in the fact that small shades of difference in the growth capacity of cells can be brought out, and by such observations it has been discovered that instead of our supporting connective tissues being composed, as might be expected, of cells of standard structure and quality, because they all look the same under the microscope, there is actually a very considerable variability in these cells. Confirmation of this fact is now available from an entirely different aspect. The injection of a specific carcinogenic substance, such as dibenzanthracene, into the subcutaneous tissues of an albino rat, for example, will produce tumors in the same rat and from the same tissues of greatly varying malignancy and even with considerable variation in the type of cell which forms the tumor. Thus the rat must have a number of biologically different kinds of connective tissue under its skin which are not, under normal conditions, revealed by examination under the microscope. So, too, cultures of human connective tissue from the thyroid gland have shown that connective tissue cells closely resembling each other in structure have different growth rates and differ in other properties.

Since success in tissue-culture work is dependent upon a host of minute details and in answer to numerous requests, a paper was published in *The* 

American Journal of Cancer this year, giving in extended form the technic of the preparation of the fluid used for the cultivation of human tissues. Different media are necessary for the cultivation of different animal structures. On the basis of the culture medium which Dr. Vogelaar has worked out in recent years in the Institute of Cancer Research, it was possible for Dr. E. L. Baker, of the Rockefeller Institute, to devise a very effective perfusion fluid for keeping alive whole organs by the Carrel-Lindbergh technic. Since it was found that perfusion of blood alone was unsuitable, and the use of embryo extract impractical, merely by the addition of some vitamins and hormones a satisfactory perfusion liquid was devised.

During the year experiments were continued with the purpose of improving the quality of the culture medium so as to grow epithelium and, fortunately, such a medium was discovered. It is of very complex composition and contains seven vitamins and several hormones, the individual significance of which cannot be absolutely stated as yet, together with a very considerable number of pure organic and inorganic materials. For example, the effect of iodine on the growth in culture of human fibrous tissue cells, referred to in the last report and soon to be published in The American Journal of Cancer, showed that chlorine and iodine may be interchanged in a medium well suited for human tissues. Up to 80 percent of the chlorine can be replaced by iodine without interfering with the growth of human thyroid tissue, but no specific effect of iodine on the growth of either fibroblasts or epithelial cells from this structure could be noticed. It was also found that while excellent growth of human tissues could be obtained in a medium containing a considerable amount of a bromide, the addition of even traces of a fluoride exerted a harmful effect. The completion of studies of this type will unquestionably lead to a better understanding of the physicochemical role played by the halogens in cell metabolism.

Parallel with this work, an extensive study was carried out on the growth of human tissues in a culture containing glutamic acid. The recent reports of Kögl and Erxleben on the occurrence of an abnormal type of glutamic acid in tumor tissue has again focused attention on the relationship between protein metabolism and tumor growth. It was found during the course of the work that an extremely dilute solution of l-glutamic acid has a pronounced inhibitory effect on growth of human

fibroblasts, provided that the higher split products of proteins, such as the proteoses and peptones, are absent. When, however, the latter are present, the l-glutamic acid has a favorable effect on growth. These observations are comparable to those obtained with another amino acid, glycine, as reported in a previous article from this laboratory. However, glutamic acid proved to be twice as effective as glycine, a fact which is understandable from a theoretical point of view. It is highly probable that further systematic study with other amino acids will prove that all of these will inhibit growth under given circumstances. Further research on amino acids will undoubtedly lead to a better understanding of the possible relationship between diet and the growth rate of cancer, and, obviously, if Kögl's observations on the differences in specific rotatory power of the amino acids in cancer are supported by work in other laboratories, a wide field will be open for exploration. Kögl in his papers has made somewhat dogmatic claims as to the importance of his discoveries, which apparently have excited a good deal of interest in their refutation. So far reports confirming or refuting his work are about even. Unfortunately, those who have criticized have not used the technic which Kögl employed, and it has been an elementary task for him to show the fallacy inherent in certain published statements.

Lack of funds and space will shortly compel the interruption of this interesting type of investigation, which, however, will undoubtedly be continued elsewhere. In any case the thanks of the Director of the Institute are due to the managers of St. Luke's Hospital who have for many years placed at the disposal of the Institute ample facilities for Dr. Vogelaar and Miss Erlichman to carry on their investigations on fresh human material removed during surgical procedures.

Professor Francis Carter Wood is still actively engaged, as president, in plans for the program of the Third International Cancer Congress, to be held in Atlantic City, New Jersey, in September, 1939, under the auspices of the International Union against Cancer, and is progressing in the preparation of the *International Diagnostic Atlas of Tumors*, referred to in the previous report. He continues as a member of the Scientific Advisory Board of the International Cancer Research Foundation, also as editor of *The American Journal of Cancer*, and has been made consultant in the United States Public Health Service in connection with the National Cancer Institute.

As the representative of Columbia University and the Institute as well as the United States Public Health Service and the New York Academy of Medicine Professor Wood attended the celebration of the discovery of radium, electrons, x-rays, and electromagnetic waves observed in Paris during International Cancer Week, November 23 to 30, 1938, presented a paper on "Utilisation des tests biologiques pour un dosage des rayons X," and with Sénateur Justin Godart, president of the International Union against Cancer, and Dr. Joseph E. Gendreau, of Montreal, broadcast from Paris a message of greeting to the friends of the late Marie Curie.

Professor Wood as chairman of the Committee on Exhibit on Cancer of the New York World's Fair opened this exhibit, with Mlle Eve Curie, with a radio address.

He gave the A. Walter Suiter Lecture on "Early Diagnosis of Cancer" before the April session of the Medical Society of the State of New York, and attended a meeting in Harrisburg for a discussion of the organization of a cancer division of the Pennsylvania State Board of Health, at which the Governor of Pennsylvania, members of the legislature, and other government officials and representatives of the medical profession were present. He has furnished the customary articles for the *Americana Annual* and the *Britannica Book of the Year*.

Professor Wood gave a number of lectures during the year, among them one on Marie Curie's work at the exercises in New York under the auspices of the New York State Conference of Polish Clubs and the United St. Stanislaus Societies; the Bergen Lecture at Yale University; a lecture on the experimental study of tumors to the students at Long Island College Hospital, and one on the biology of cancer to the students in zoölogy at Barnard College.

Professor Woglom gave his usual course on the morphology of tumors at the Institute during the Summer Session, and later in the year addressed the students at the College of Physicians and Surgeons and at the University of Pennsylvania.

The Institute continues to furnish a large number of tumor-bearing animals to various scientific workers and research laboratories.

A list of the most important publications of the members of the laboratory staff during the year follows:

Curtis, Maynie R., and Wilhelmina F. Dunning, "Linkage in Rats between

Factors Determining a Pathological Condition and Coat Color." *Genetics*, XXIV (January, 1939), 70.

Heiman, Jacob, "The Anterior Pituitary Gland in Tumor-Bearing Rats." The

American Journal of Cancer, XXXIII (July, 1938), 434-48.

"A Comparative Study of the Ovaries and Other Endocrine Glands in Rats with Benign Transplanted Breast Tumors and in Normal Rats Injected with Sex Hormones." The American Journal of Cancer, XXXIV (December, 1938), 586–88.

Packard, Charles, "The Biological Measurement of Radiations." The American Journal of Roentgenology and Radium Therapy, XLI (March, 1939),

441-43.

Vogelaar, Johannes P. M., and Eleanor Erlichman, "Contributions to Tissue Culture Technic." *The American Journal of Cancer*, XXXV (April, 1939), 510–20.

Woglom, William H., and Joel Warren, "A Pyogenic Filterable Agent in the Albino Rat." *The Journal of Experimental Medicine*, LXVIII (October, 1938), 513–28.

"Sarcoma 37 and the Virus Problem." The American Journal of

Cancer, XXXV (March, 1939), 374-77.

"The Nature of a Pyogenic Filterable Agent in the White Rat." The Journal of Hygiene, XXXIX (June, 1939), 266-67.

Wood, Francis Carter, "The New Cancer Test—A Warning as to Its Limitations." The Independent Journal of Columbia University, Vol. VI, April,

1939.

"Utilisation des tests biologiques pour un dosage des rayons X." Unio Internationalis contra Cancrum Acta, Numéro spécial consacré à la Semaine Internationale contre le Cancer et à la Réunion Internationale pour la Commémoration de la Découverte du Radium, des Electrons, des Rayons X, et des Ondes Hertziennes, IV (Nos. 1–2, 1939), 165–74.

It is a great pleasure to acknowledge the contributions from the Anna Fuller Fund, the Childs Fund, and the Louis D. Beaumont Trust. As stated elsewhere, the generous grant from the John and Mary R. Markle Foundation has been of the utmost help in our work in the million-volt x-ray apparatus built by the Institute in connection with the Presbyterian Hospital. The Director also acknowledges with gratitude a gift of \$10,000 from the anonymous donor who for so many years has regularly contributed to the work of the Institute. Thanks also are most generously tendered for the many smaller gifts received during the year. All these contributions have enabled the Institute to carry on its planned research without interruption.

As this is the last report which the present Director will make on the work of the Institute of Cancer Research, he takes this opportunity to express his appreciation of the faithful services which have been given to the Institute during the twenty-six years of its existence by the members of the staff and the technical assistants. No one who has not been completely immersed in research of an extremely tedious and time-consuming nature, as is inevitable when attempting to unravel even some small aspect of so complex a biological problem as that of cancer, can comprehend the arduous nature of the work, requiring the recording of observations made on thousands of animals, of the necessity for the most careful repetition of such work to eliminate possible errors, and the long hours which many of the investigators gave freely to the Institute without any feeling of self-sacrifice. In working with biological material one can neither slumber nor sleep. Sundays and holidays cease to exist for those who have to observe for statistical purposes large groups of animals, the death of a small portion of which will completely upset the experimental work of a year or two. After a long, hot, summer day some member of the staff was always to be found checking the water supply of the thousands of small creatures whose life depended upon their receiving an ample supply of water during the night. In all these years of continuous hard work by a staff, of necessity underpaid, the Director never heard a complaint that the hours were too long or the holidays too few. Many of those connected with the Institute worked only on special problems and for a short time, but others devoted their lives to its research. One especially, Dr. Frederick D. Bullock, was a member of the original group, and he died in his prime only a few years ago. Some of the original staff still remain on active duty and for them we can only wish that they may continue to contribute in the fields they have made their own and with all success.

Respectfully submitted,

Francis Carter Wood,

Director

June 30, 1939

# REPORT OF THE DIRECTOR OF LIBRARIES

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University
Sir:

As Director of Libraries I have the honor to present the following report for the academic year ending June 30, 1939.

The total number of recorded volumes in all the libraries of the University at the close of the year 1938-39 was 1,665,181, an increase of 50,130 for the year. Statistics of the recorded use of the Library, defective as they are as a measure of the service of the Library to members of the University, show an increase of 54,991 volumes loaned and used. Inasmuch as the service of the main loan desk is completely and accurately recorded in the number of volumes requested for home use and for use in the main reading room or departmental libraries, it is perhaps the most dependable single index of Library use. Volumes supplied by the main loan desk numbered 320,453, an increase of nearly 10 percent over the preceding year and an increase of about 67 percent over the year 1933-34, the last year before the general library moved to South Hall. Detailed statistics of accessions, cataloguing, and binding and circulation for the last two years will be found on page 31. A table with comparable figures for each year from 1926-27 to 1936-37, inclusive, was published in the report for the year ending June 30, 1937.

A heavy and increasing demand for library service from persons not associated with the University in any way constitutes a serious problem for the Library administration. Little distinction has been made in the past between the service offered to the faculties and students of Columbia University and to the faculties and graduate students of other institutions. The Library Rules as printed in 1916 contained the following provision:

Full library privileges, including the borrowing of books for home use, are extended to officers, students and graduates of all schools of the University, to members of the faculties of institutions of higher education in Greater New York, and to principals and heads of departments of public schools.

In practice, the above rule has been so liberally interpreted that the Columbia libraries have been conducted in many respects as free public libraries, and the public has come to regard them as such. However, the cumulative effect of changes of various kinds which have taken place in the last twelve or fifteen years makes it impracticable to continue to give full library privileges to any but members of the University. One of the most striking changes is the growth in the number and size of other institutions of higher education in and near Greater New York. In 1916 the principal institutions of collegiate grade had a registration of less than thirty-five thousand students, with some seventeen hundred persons on their faculties. In less than twenty-five years, the number of students in such institutions has increased threefold, while the teaching staffs have grown in about the same proportion. The library facilities provided by these institutions have, in general, not kept pace with the needs of their faculties and students. The colleges supported by the City make little attempt to provide any library service beyond that required by undergraduates. As a result, their faculties and graduate students have come to depend more and more on the library resources and services of Columbia University for research work. Without the formal sanction of the University authorities, and even without their knowledge of what was taking place, the Columbia University Library has been expected, in spite of inadequate staffs and budgets, to serve as a central reference and lending library for a score of institutions. A member of the Board of Higher Education, referring to the lack of library facilities for the city's colleges, was reported in The New York Times two years ago as saying that "students and teachers in the City institutions are now using the Columbia University Library through its courtesy."

So far as it relates to students in the City colleges this statement is in error. The Columbia University Library has not undertaken to give courtesy service to undergraduate students in other institutions since it is physically and financially wholly impossible to do so. Yet the contrary impression is widely prevalent. Instructors in some of the colleges and secondary schools often advise their students to come to Columbia to use reading rooms and book collections, which are barely adequate for our own students.

Pressure on the Columbia University Library to give a general public library service does not come solely from the students and faculties of other educational institutions. A large number of scholars without insti-

tutional connections are carrying on private research of more or less importance. A great variety of organizations, large and small, are attempting to carry on research in many fields for which library facilities are required. At the present time conditions in several countries of Europe have driven scholars in great numbers to this country, and many of them have taken up their residence in New York. Several educational foundations are carrying on extended programs of grants for research, and many of the recipients of these grants wish to carry on their work in New York. Such individuals and organizations generally assume that the Columbia University Library is in a position to give them full library service for the asking. Scholars who come to New York for longer or shorter periods to work in libraries often take up their residence in the neighborhood of the University on the assumption that they are entitled to full use of its libraries. It is quite unusual for them to inquire under what conditions they may be given the library privileges which they think they must have, until after they have come to the city and engaged living accommodations near the University.

It is true that the New York Public Library, one of the greatest research libraries of the world, is freely available to every serious scholar and has been used heavily by the faculties of all educational institutions in the area. But the facilities of the Public Library have not kept pace with the demands made upon it. Some years ago it became necessary for it to exclude college and high school students from its reading rooms. Graduate students and mature scholars find it increasingly difficult to carry on their work there on account of the congestion. Until 1934 conditions were no better in the Columbia libraries, but with the opening of the new University Library building, South Hall, in 1934, the number of applications for library service from the non-University public began to show a marked increase and have now reached a point where steps must be taken to bring them under control, unless the University finds it possible financially and desirable as a general policy to provide a public library service supplementary to or in competition with that of the New York Public Library.

Demand from the non-University public is diverted to the University not only by congestion in the reference department of the Public Library, but by the fact that the latter cannot lend any books for home use nor admit readers to its stack rooms. Research libraries open to the public,

with few exceptions, do not lend books for home use and ordinarily admit few if any readers to their stack rooms. Both of these privileges, invaluable to the student and scholar, are normally given by a university library as a matter of course to its own research students and faculties. But no university library now in existence could undertake to extend these valuable and coveted privileges to the general public under the conditions which exist in metropolitan New York at the present time.

The condition which confronts the Columbia University Library is obviously to a large extent a result of its location in the greatest city in the Western Hemisphere. If the University were situated in a much smaller community, far from the cosmopolitan city of New York, there would be no problem at all of this kind. Courtesy privileges would be almost entirely on a reciprocal basis. There would be no potential demand for service of such proportions as to threaten a lowering of standards or complete breakdown of service to members of the University.

This difficult problem is referred to here not with the idea of offering a wholly satisfactory solution, which is probably not possible, but rather to bring it squarely to the attention of all concerned. A detailed analysis of the demand for library service from nonmembers of the University is now under way. Beginning in August, 1938, applicants for library privileges not registered students, nor members of the administrative or teaching staff, have been asked to state in writing the essential facts about themselves and their need for library service. Over fifteen hundred of these applications were filed during the first year, and probably a still larger number of persons continued to enjoy privileges in various departments without formality. An imposing number of persons who would not think of demanding any other free service from the University seem to think they have some inherent right to make full use of its libraries.

While the Library is engaged in studying the problems presented by the demand from the non-University public, only the most necessary changes have been made in the rules governing such use, and these changes do not affect in any way the privileges of members of the University—students and the teaching and administrative staffs—nor the privileges of alumni, except that requests for some of the special privileges are being more carefully scrutinized. More care is being exercised in the granting of privileges to outsiders, but no fundamental change has been introduced

except in the lending of books for home use. The traditional policy of liberal treatment of visiting scholars is being maintained, although their increasing numbers and the temporary character of their residence in New York makes necessary a certain amount of formality.

It can be said, in general, that the present policy of the Library is to permit any serious and mature scholar to use in its reading rooms any book he needs in his work if it is not available for his use in public or other libraries open to him. While this rule seems to be clear and simple as a principle, it is very difficult to apply in practice. Very few applicants come to Columbia with a definite list of materials not to be found in the public libraries. Requests are based on the general statement that the applicants cannot do their work in any other library. Investigation shows, however, that the actual reason for wishing to work at Columbia is more likely to be simply the convenience of the applicant. Although a candidate for a higher degree in some other institution may state that little or none of the materials necessary for his work are available in his own library or in the public library, it frequently turns out that he has made no effort to locate his materials in libraries which are normally open to him. The burden of proof that he can do his work only in the Columbia Library has, therefore, to be placed on the applicant. Some responsibility must also be placed on the faculty advisers of such students to see that they do not choose for their research work subjects for which the necessary materials are available only or very largely in libraries or collections not normally open to the public.

The task of passing on applications for reference use of books, that is, use within the building, is complicated by the fact that some of the Library's collections and services are designed to a larger or smaller degree for the use of both research scholars and students in general. Research libraries are more and more feeling the necessity of devoting their resources to special fields and coördinating their special collections with those of other libraries so as to avoid wasteful duplication. In a field in which a library voluntarily or by interlibrary agreement attempts a high degree of specialization, it should expect to serve the serious scholar without considering his institutional relationships. Columbia has a creditable number of such collections to which scholars are always welcome. The librarian of the East Asiatic collections reports, in spite of the University's

extensive programs of research and instruction in that field, that at least one third of the work of that department of the Library is for persons not connected with the University. Although the staff of this department, as in many other parts of the Library, is not large enough for the work that should be done, service to outsiders is regarded as justified by the fact that there are no other collections of Chinese and Japanese books available in or near New York.

It should also be said that the Columbia University Library has no thought of flouting the well-established traditions of reciprocal courtesies between libraries. Our own resources are far from adequate for the needs of our own scholars and graduate students, so that they frequently need to use other libraries, but everything possible is done to see that they do not turn to other libraries until they have exhausted the resources of our own. The difficult problem which now confronts this library, however, has nothing to do with a normal exchange of courtesies between universities and other research organizations. It can safely be estimated that not more than 5 percent of the demand for service from the non-University public could reasonably be interpreted as falling within the sphere of reciprocal courtesies. The other 95 percent represents simply a desire to take advantage of this University's library facilities involving no possibility of reciprocity of any kind.

It may be urged that the University should extend its library service freely to all, regardless of expense or of the effect on service to members of the University, as a means of creating good will. The experience of responsible members of the Library staff who come in contact with outside readers strongly suggests that results of this kind are bound to be negligible. Students, faculty, and staff—those who have an indubitable right to the best the Library can give—are almost always reasonable, courteous, and considerate in their demands. The same cannot be said of a large proportion of those who first receive valuable privileges as a courtesy and come presently to demand them as a right.

There seems to be no reason why, of all the various services the University offers to its members, the Library's should be the only one given away to the general public to create good will. Lecture rooms not filled to capacity are no longer thrown open to the public. The University probably suffered no loss of good will when the practice of "auditing" courses

without payment of fees was stopped some years ago. Gymnasium and athletic facilities are not made available to the public. Service of the Medical Office cannot be free to all who apply, whether members of the University or not. Vacant rooms in Residence Halls are not made available without charge to earnest and impecunious teachers and students enrolled in other institutions which do not provide living accommodations. Vacant chairs in the dining halls cannot be occupied by any applicant without the charge made to our own students, in the hope that their gratitude may build good will. Yet it is sometimes assumed that the University's library service, one of the most expensive it provides for its members, should be freely available to teachers and students from other institutions.

It is conceivable that the Trustees of the University, convinced that a free public library service would do more to promote the objects for which the University exists than some of the activities now being supported, might decide to divert a large part of its income to the support of a great research library for the free use of all who apply. If the University Library were authorized and directed to make its services freely available to even a selected public, the appropriations for its support should at once be greatly increased, and there is no limit to the amount of money that could reasonably be spent for books, buildings, and salaries.

The Library budget for the year 1938–39 was close to half a million dollars (\$494,886). Only the Department of Buildings and Grounds was allotted a larger share of the income of the University. Yet in practically every one of its thirty or more administrative units funds for the purchase of books and equipment are inadequate. The staff at each point is barely adequate to cover schedules and carry on the most necessary activities, giving no opportunity to plan and build for the future. The salaries in nearly every grade of this minimum staff are inadequate. Responsible, full-time library workers, having college degrees (some of them also having higher degrees), professional training, and much successful experience receive in many cases a lower compensation than unskilled manual laborers. It would probably be correct to say that the average compensation of members of the professional library staff, as distinguished from the clerical staff—which is paid still less, of course—is considerably below that of those employed by the University in the various mechanical trades. At the same time in virtually every department of the Library the

staff is carrying as heavy a work load as seems possible without a disastrous breakdown in the service. This is an important consideration which must not be overlooked if the Library is to be expected to extend freely to the general public the same valuable and costly services that it is under obligation to provide to members of the University.

At most hours of the day there are unoccupied seats in many reading rooms. There are always many books on the Library shelves that are not in actual use. But it is not simply a question of permitting nonmembers to walk in and occupy those unfilled seats and read or borrow those unused books. From the moment the visitor steps into the building until long after he leaves, his presence entails activity of many kinds on the part of the Library staff. An unfilled seat in a classroom might be occupied by an unregistered student without placing an extra burden on the instructor or on anyone else, but in the Library the visitor who consults the card catalogue is almost certainly trying to use the same section of the alphabet as some student or teacher, and if he uses reference books he is probably keeping others from using them or is at least contributing to the heavy expense of replacing wornout books and bindings. When a visitor asks for a book from the stack he adds to the necessary record keeping and other forms of service. The presence of hundreds of visitors every day makes a very noticeable addition to the staff load and results in an appreciable lowering of the amount and quality of service which can be given to members.

What is the nature and extent of any possible obligation resting upon the University to provide library service for members of other institutions and for students and scholars who have no institutional relationships at all? Many applicants for library privileges seem to assume that the University is in some way under obligation to give them what they seek, although usually they base their claims on the ground either that they cannot do anywhere else the work they want to do, or that they can do it only under severe handicaps. In hundreds of cases such statements may be perfectly true, but that does not seem to warrant the Library administration in taking the responsibility of putting nonmembers on the same basis as members of the University. Many guest readers spend all their time in the Library and demand much more in the way of special service and privileges than is given to students and Faculty. The cost of the

service given to them, if it could be measured, would be found to be far greater, on the average, than the service given to members of the University Faculty.

In some of its aspects the correct policy in handling the demand for library service to the non-University public is reasonably clear. It is clear, for example, that the Library cannot admit to its reading rooms the undergraduates enrolled in other colleges and universities. It is generally conceded in principle, if not followed in practice, that an undergraduate college should provide the library materials needed by its faculty and students in the normal processes of giving and receiving instruction. Some colleges also assume a certain degree of responsibility for providing the materials required by members of the teaching staff in carrying on their personal work of writing and research.

It is almost equally clear that the University cannot undertake to provide library service for students enrolled in the graduate and professional schools of other institutions. At present the practice is to extend courtesy privileges to such students for a limited period to enable them to make use of rare or unusual materials not available to them in their own institutions or in the public libraries. In thus limiting the service it gives to students from other institutions the Library assumes that it is the duty of every institution attempting to offer graduate and professional training to provide the necessary basic library materials and services for both students and faculty, especially if it admits and becomes responsible for a large number of students in any given field. Columbia University is not attempting to offer graduate instruction or supervise student research in fields in which its library resources are not reasonably adequate. The Library must necessarily be administered on the assumption that other institutions are following the same policy.

The Library is the laboratory for all research in history, language and literature, and the social sciences; in the natural and physical sciences the Library is a necessary adjunct to the laboratory. Probably no college or university would undertake to offer either graduate or undergraduate instruction in physics, chemistry, or biology if it had to depend largely for its laboratory facilities on other institutions. Why is it that this is a fairly common practice in the social sciences and humanities? This is not meant to imply that even the largest institution should attempt to be en-

tirely self-sufficient in these or in any other fields. There is need for a great extension of the principle of specialization and coördination of library resources, but this can be brought about only on a basis of real reciprocity.

The necessary features of a reasonable policy in meeting the demands for library service from students in other institutions seem to be perfectly clear. A much more serious problem is the demand from members of their faculties and from large numbers of serious scholars and writers who have no institutional relationships. For many years it has been the practice of the Columbia Library to grant "faculty privileges" to such persons without much question as to their reasons for asking the University for these valuable privileges and even without requiring the formality of an application. It has now become clear that a change of policy is necessary if the Library is to set and maintain a reasonably high standard of service to its own constituency, unless the University after full consideration decides to provide a public or semipublic library service. This, as pointed out above, would entail larger and ever larger expenditures for books, buildings, equipment, and salaries. The present Library administration is not recommending such a program, but is, on the contrary, assuming that the financial condition of the University will make it necessary for the Library to operate without the substantial additions to its budget which have been necessary in the past twelve or fifteen years. In 1926–27 the total Library budget was \$292,600. In the year covered by this report it was \$495,170, an increase of nearly 70 percent.

Even though it cannot depend on larger appropriations to meet steadily increasing demands, the Library hopes in one way or another to be able to continue to serve a large number of serious and mature scholars who are doing important work that cannot be done so advantageously elsewhere. Applications from such persons cannot ruthlessly be denied or disposed of by any general rule. They must each be considered on their merits, even though it does require a great deal of the time of the most responsible members of the Library staff.

In the consideration of applications the relative importance of the applicant's work and his personal integrity present less difficulty than the type of privilege desired. Roughly speaking, library privileges are of three kinds: reference use, that is, the use of books within the Library; access to stack rooms; and the borrowing of books for home use. At the present

time very few applicants are denied the privilege of using books in the Library buildings for a longer or shorter period, but many of them demand a great deal more than this.

Nearly all applicants seek admission to the stack rooms, alleging that they cannot do their work without that privilege and that they turn to this library because access to the stacks is denied to them in other research libraries. The great research libraries which refuse all access to their stack rooms have ample reason for such a policy, and many of these reasons are equally valid for a university library but are offset, to some extent, by the advantages, real or assumed, of free access to the stacks on the part of students, particularly graduate students, and the faculty.

The service of any library tends to be measured by the ability of the staff to produce promptly or to account for any book listed in its catalogue. The larger the number of readers who have access to the book stacks, the more difficult it is to meet this standard of service because of the large number of misplaced books. The main stack room of the University Library has about sixty-five miles of shelves, more than half of them already filled. With the present staff it is impossible to "read the shelves," that is, to check the accuracy of the location of each book on the shelves, more frequently than once in two or three years. The larger the number of persons given the run of the stacks the greater the danger of confusion on the shelves and the more the interference with service to readers calling for books for use in the reading rooms, in their offices, or in their homes. This point is usually overlooked by persons who seem to think they are doing the Library staff a favor by asking for admission to the stacks. With stack passes in the hands of 2,000 graduate students and every member of the faculties, it is remarkable that book service over the desk is as good as it is.

It has to be admitted that a certain minority of library users do not hesitate to tear an article from a bound volume of a periodical or cut out paragraphs and pages rather than take notes. Deliberate mutilation of this kind is always difficult to combat, but it can be carried on with much less chance of detection in the stack rooms than when books are secured on requisition over a charging desk. The fact that such acts of vandalism are punishable under the Penal Code of the State seems not to be an adequate deterrent.

Those who seem to think that any restriction on access to the stack rooms is evidence of lack of desire to cooperate with scholars need also to be reminded that a university library is responsible for the safety and preservation of its materials as well as for their use. This library has on the open shelves in the main stack room many thousands of rare and valuable books which in other libraries are kept under lock and key in "treasure rooms." Most of these books are deliberately left on the open shelves here to make them as useful as possible to scholars, but such a policy calls for watchfulness in giving access to the stacks. The present staff is barely able to check admissions to the stack room, which average about 400 a day, in order to see that unauthorized persons do not enter. Non-University readers who are denied passes sometimes complain that the stack rooms are not crowded with people. Fortunately that is true, but unfortunately the elevator service is already becoming inadequate so that more and more readers have to climb stairs or lose time in waiting for service.

Difficult as it is to reach wise decisions on the hundreds of applications from the "outside public" for access to the stack rooms, this is far less of a problem than the demand for the privilege of borrowing books to be taken away from the University. The right to borrow books, so much desired by the non-University readers, is the most valuable of the library privileges that membership in the University confers. This is a privilege for which the student pays through his tuition and other fees just as definitely as for the instruction he receives in the classroom and laboratory. Except so far as may be called for by proper reciprocal relations between institutions of learning, the present Library administration assumes that it has no right to provide gratis to outsiders the service for which students pay a substantial amount and which for the Faculty is either a necessary means of carrying on their University work or a personal privilege to be considered as one of the compensations of University membership.

The ultimate solution of all the problems created by the heavy and insistent demand for library service from the non-University public may be found in a system of fees analogous for library use to the tuition fees paid by students, which include payment for library privileges. The desirability of some kind of a fee system has often been pointed out by persons who feel that the service of the Library is indispensable to them but who

do not relish having to seek it as a purely personal favor. There is also ample precedent for a system of library fees in universities whose location makes the demand for service from nonmembers much less of a problem than it is in New York.

A well-conceived fee system would be easier to administer, in many respects, than the present policy which requires the Library to pass judgment on the merits of each application, and to decide what privileges are warranted and how long they may run. Under an appropriate fee system the Library would have only to assure itself that the applicant is a serious scholar of good character who would make proper use of the privileges and not abuse them. He would then receive whatever privileges he is willing to pay for—reference use, access to the stacks, or borrowing. A fee even of a nominal amount would automatically eliminate most of the applications from persons who could use the public libraries but prefer the University Library if service is free.

Fees charged would necessarily be nominal in the sense that they would be expected to cover only a small part of the cost of the service rendered, including books, buildings, and equipment. They should, however, go far toward meeting the cost of the additional personal service required. Library cards would be issued without fees to accredited persons for short periods, so as to meet all the ordinary requirements of interlibrary and interinstitutional courtesies.

There would always be the worthy applicant for whom the payment of even a nominal fee would be a hardship, just as the payment of tuition fees tends to keep away from the University some of the most promising students. Funds could be provided, even as scholarships and fellowships are provided, from which the Library fees of indigent scholars could be paid. A committee of scholars in the University might be asked to administer a fund from which the Library fees of unattached scholars could be paid. Institutions and organizations not providing library facilities for their teachers and research workers would probably pay their Library fees.

With a fee system in force to serve as a kind of dike to ward off the inundation of demand for free service threatened from all sides, the Columbia University Library might well become a still more important center for research, particularly in the humanities and social sciences.

It is a pleasure to record a notable improvement in the handling of officers' borrowing records at the main loan desk. At a meeting of the Library Council held on January 18, 1938, the Director of Libraries reported that many books are lost and hundreds rendered inaccessible for years through failure of officers to comply with the annual request to return to the Library at the end of the Spring Session all books not in actual use and to effect a definite renewal of the loan of each volume it is necessary to retain. The Council advised the Director of Libraries to take drastic steps, if necessary, to enforce this rule. Response to the annual request to officers sent out in May, 1938, was very gratifying. Only twenty-four failed to respond in any way. The coöperation of officers in the annual check-up in the spring and summer of 1939 continued to show marked improvement over past years.

Unfortunately, the Library cannot undertake to furnish officers with lists of books charged to them because the volumes are necessarily charged by call numbers, and the task of looking up authors and titles and making lists for 600 to 800 accounts, many of them very extensive, would be too great for the loan desk staff. Any person worthy of the title of librarian would rather have a book in use than not in use. Likewise, a book that is not being used he would rather have on the library's shelves where it is potentially useful than have it remain unused in a borrower's hands, having neither actual nor potential use. The faculty privilege in the borrowing of books, involving no limitation on the number of books that may be on loan at one time nor on the length of time they may be retained, places a special responsibility on officers to be on their guard against abuse of the privilege. Happily, instances of complete disregard of this responsibility are rare.

In the year 1938–39, 1,392 volumes were loaned by mail to 247 libraries through the interlibrary loan service. This seems to be a small number when compared with circulation of books by other methods. However, the bibliographical work and the correspondence involved in this service are so considerable that they require practically the full time of two members of the staff. From eighty-one libraries we borrowed 763 volumes by mail, an increase of 6 percent over the preceding year. Dependable statistics are not available for the number of volumes borrowed from and loaned to libraries in New York City, but it is estimated to be equal at least to the number handled by mail.

A library for the use of students and scholars is to be looked upon as a laboratory rather than a museum. It has inevitably, in the main, to be a storehouse of materials to be drawn upon by the aid of catalogues, bibliographies, and the personal knowledge of librarians and curators. But the effective librarian, who has a thorough knowledge of his collections and an appreciation of their significance to students and scholars, is not content to play merely the passive role of a card catalogue. He needs to be not only a cataloguer, a bibliographer, and a reference librarian, but something of a showman if he is to put his collections completely at the service of his clientele. Hence carefully planned exhibitions on a larger or smaller scale have been set up as usual in many departments. Even the slightest and least impressive of these exhibits requires an amount of thought and careful preparation not suspected by the casual visitor and not easily added by hard-working librarians to their other duties.

Only a few of the outstanding exhibitions of the year can be mentioned here. The Avery library schedule follows. July—September: Architectural classics; October—November: Measured drawings and renderings of old New York buildings, loaned by the Federal Art Project; December: Original drawings and sketches by Stanford White, chiefly loaned by Lawrence Grant White; January: The architecture of railroads, including selections from the Parsons Collection of Railroad Prints; February: The secular and domestic architecture of the Middle Ages; March: Books and illustrations dealing with gardens and the history of garden design; April: Original sketches and architectural drawings from the Magonigle collection; May—June: Rare and important architectural books in the Avery library.

In South Hall the year began with a showing of material relating to the life and works of Alexander Pope; from August to November the work of Frederic Goudy, type-designer, was on view; in December the work of Guy de Maupassant was shown in a special collection of interest to members of the Modern Language Association meeting at the University. In January the cases were put at the service of the Camera Club for its annual exhibition. From February to April interesting items from the papyrus collection were shown, and during the remainder of the year a special collection depicting Washington's inauguration on April 30, 1789, interested many visitors.

Three main exhibitions were shown in the Smith and Plimpton libra-

ries. August–November: Selected books and instruments illustrating the history of mathematics, in connection with the fiftieth anniversary of the American Mathematical Society; December–April: Orientalia, mainly manuscripts, including a large number of beautifully illuminated Korans, Islamic book bindings, and miniature paintings from the David Eugene Smith collections; May–June: Aspects of the life and thought of the Renaissance, as seen in contemporary books and manuscripts.

The exhibition room of the Special Collections Department was used in January for world literature in illustrated editions of the eighteenth to the twentieth centuries. February—March: Material depicting the history of the School of Engineering, in anticipation of the celebration of the seventy-fifth anniversary of its founding; April—May: Manuscripts and first editions of the writings of Ralph Waldo Emerson, timed to coincide with the publication by Columbia University Press of the six-volume edition of Emerson's letters, prepared by Professor Ralph L. Rusk, and using as a basis the Salem Hyde Emerson collection acquired last year, supplemented by interesting items loaned by private collectors.

The Music Librarian, Mr. Richard S. Angell, prepared and published a catalogue of the MacDowell exhibition of 1938. He also assisted in the preparation of an exhibition on the history and construction of the pipe organ, shown in the Avery library in May. The East Asiatic Department continued its program of varied exhibits drawn mainly from its own collections of books, pictures, and art objects. Material was given or loaned for exhibition by Professor L. Carrington Goodrich, Professor Thomas T. Read, Dr. R. L. Dickinson, and Professor Ernest K. Smith of Yenching University.

An exhibition devoted to the Italian poet Gabriele d'Annunzio was held in the Paterno library in April commemorating the first anniversary of his death. In the medical library seven exhibitions were on display dealing with varied topics of interest to students and alumni. The Columbia College library, the law library, the School of Library Service library, and other departments used their more limited exhibition facilities in various ways for the benefit of their own student groups.

Supported by a grant of funds from the American Council of Learned Societies, work was begun on November 1, 1938, on a long-deferred program for the complete and accurate cataloguing of both Chinese and

Japanese collections. A check list or finding list of the Chinese books, serving some of the purposes of a scientifically constructed catalogue, has been kept up by the various librarians who have been in charge in recent years. No attempt had been made to catalogue or even to classify the Japanese books. Mr. Augustine Li, formerly on the staff of the National Library of Peiping, and more recently engaged in the cataloguing of Chinese books in the Library of Congress, was put in charge of the work with the Chinese material; Mr. Osamu Shimizu, working with Miss Catherine L. Laird, Librarian of the East Asiatic collections, has been responsible for the Japanese books. The first few months were spent in studying the difficult technical problems involved in making plans for card catalogues that would best serve the purposes of students and scholars and at the same time comply with the requirements laid down by the American Council of Learned Societies as to what information should appear on the catalogue cards. The Council was interested primarily in the work as an experimental study in a field with few precedents and no recognized standards and confined its support to the production of a single card for each volume. A form of card satisfactory to all concerned was adopted about February 1, and actual cataloguing in both collections has since been pushed as rapidly as possible. Classification and production of complete catalogues will require a continuation of the work for two or three years.

The greatly augmented program for the selection and purchase of books in the Chinese language, made possible by a grant of \$25,000 by the Rockefeller Foundation, as reported a year ago, has been carried on as rapidly as possible under the supervision of Mr. Chi-Chen Wang, Curator of the Chinese collection. Not including periodicals, pamphlets, or scrolls, a total of 10,595 volumes was added during the year, making a total of 61,417. The rapid growth of this collection has already brought about a serious shortage of space in the stack room of the East Asiatic collections. Practically every foot of shelving that can be accommodated has now been provided. Much additional shelving at some near-by point in Low Memorial Library will have to be made available in the very near future.

Additions to the Japanese collection numbered 1,731 volumes, 1,220 of these forming the highly important "True Records of Emperors of the Ching Dynasty," a primary source not only for the study of Chinese his-

tory, but also for the history of Japan and Korea as well as of other countries that were in contact with China during the Ching dynasty. So many valued gifts came from individuals and institutions in Japan that they cannot all be listed here. Most of the purchases were from two funds, one donated by Baron H. Sumitomo to provide books on various aspects of Japanese culture, the other from Mr. T. Nomura for the special purpose of adding works on the economic history of Japan. Mr. Ryusaku Tsunoda, Curator of the Japanese collection, was given leave of absence from the University from February to September, to enable him to visit Japan for conferences with old and new friends of our Japanese collection. The Library's general collection of books from Japan in Western languages has been enriched by purchases from funds provided by the Institute of Japanese Studies and by the gift of 253 bound volumes and 1,375 pamphlets and periodicals by Professor Evarts B. Greene.

The Government of France gave 429 volumes selected by the Library with the aid of members of the faculties from extensive lists of the publications of various French publishers. The collection of 324 books in the Bulgarian language, previously reported as a gift from King Boris III of Bulgaria and the University of Sophia, was formally presented by the Royal Bulgarian Minister, Dimitri Naoumoff, at appropriate exercises in the Harkness Academic Theater on February 16, 1939. The gift makes an excellent foundation for what it is hoped may eventually become a reasonably complete equipment for the study of the history, literature, and culture of the Bulgarian nation.

The thanks of the Library are due to The Hellenic Students' Society PNYX of Columbia University for its continued interest in building up the collection of modern Greek books. Through this organization the Association of Lacedaemonians contributed a sum of money for the purchase of books selected by a committee of the Faculty of the University of Athens appointed to coöperate with Greek organizations in this country to secure funds and books for the Greek library. A committee of the Columbia Faculty, with Dean George B. Pegram as chairman, was appointed by the President to assist in this endeavor.

The resources of the Avery library were enriched by the indefinite loan from the United States Federal Art Project of all the material accumulated by the Architectural Section of the Index of American Design,

including drawings, renderings, photographs, and research notes dealing with early architectural work in New York City. Another notable addition to the collections of the Avery library came through the gift from Mrs. Harold Van Buren Magonigle of all the drawings left by her late husband, together with a number of books and some manuscript material from his library. Mr. Magonigle's practice covered the whole period of American architecture from about 1896 to the time of his death on August 20, 1935. The Magonigle collection comprises 2,071 drawings, including the working drawings and details of actual buildings and a series of famous renderings for competitions.

Columbia College library was fortunate in receiving twenty-five volumes in the field of mathematics purchased with the William Putnam Memorial intercollegiate prize which was won for Columbia by Sidney William Benson, Boris Abbott Jacobsohn, and Joseph Statsinger, students in Columbia College.

Perhaps the most important gift of the year was the library of the late Professor Richard Gottheil, presented to the Library by Mrs. Gottheil as a memorial to her husband. The greater part of the 15,000 volumes consists of Arabic and Syriac books, periodicals, encyclopedias, and dictionaries and makes an invaluable addition to the extensive collections the Library already has in those fields. The material relating to American Jewry in the last century will be invaluable for the study of Jewish religious, social, and economic life in America.

Mr. Edward Epstean gave many valuable books which fill gaps in the Epstean collection of the early history and development of photography as well as important modern books in the field. Among the interesting additions to the collection were Traber's Nervus Opticus (1675), with its description of the camera obscura; Scheele's Opuscula Chemica et Physica (1788–89), with his observations on the dissimilar powers of the rays of the spectrum in darkening nitrate of silver; and the two-volume Excursions Daguerriennes (1841–42). More than a hundred volumes published before 1900 were added to the collection.

Professor Emeritus David Eugene Smith continued to be one of the most generous donors of books, periodicals, and money for the purchase of books to be added to the splendid library on the history of mathematics which bears his name.

Two outstanding gifts came to the music library: the holograph of MacDowell's Drei Lieder für vierstimmigen Männerchor, op. 27, and the holograph of Douglas Moore's The Devil and Daniel Webster, which was the principal production of the American Lyric Theater in its first season, May, 1939. Professor Moore gave the Library his original score of the work, for voices and piano, containing a dated account of the progress of the composition. This is the only complete copy of any version of the work which is entirely in the composer's hand. Professor Moore also gave the Library the holograph of Horatio Parker's Serenade, op. 59 for voice and piano, signed and dated by the composer, and a copy of Randall Thompson's "Peaceable Kingdom" in the original edition for private distribution.

The largest number of books given to the journalism library came from Dean Ackerman. Mr. Marshall Don Beuick, a graduate of the School of Journalism, continued his practice of contributing books from his private collection; Miss Maria Constanza Huergo, of Buenos Aires, a student of the School of Journalism, gave some twenty voluminous reports of the Argentine Republic and of the Buenos Aires municipal government; Karl Wrzos, one of the outstanding editors of Poland, gave six volumes of his writings.

Professor Ralph L. Rusk gave the Library his collection of photostat negatives of Emerson's letters; Miss Isadore G. Mudge, Reference Librarian, gave seventeen editions of the novels of Charlotte, Emily, and Anne Brontë in foreign languages; Professor Arthur E. Neergaard gave a copy of the first edition of Pasteur's Etudes sur la Bière; and Professor Adriaan J. Barnouw gave a file of De Crisis Courant, running from October 22, 1917, number 1, through September 25, 1919, number 39. Two hundred and twenty-nine volumes were received from the library of Professor A. Charles Babenroth. Through the courtesy of Miss Charlotte Field, librarian of the National Investors Corporation, the business library received its complete file of material on foreign governments and on 196 foreign corporations, including their annual reports back to the early 1920's. Mr. S. B. Lurie, of Fuller, Redmond & Rodney, donated that company's complete files on hundreds of corporations.

Professor Jerome P. Webster contributed \$577 for the purchase of books relating to plastic surgery; the Phi Delta Epsilon Fraternity, \$50 for

the purchase of books as a memorial to Dr. Jacob Braun, College of Physicians and Surgeons, '05; and the Department of Otolaryngology, \$60 to pay the subscriptions to five journals. The Journal of Clinical Investigation, through the courtesy of its editor, Professor Randolph West, presented 563 current numbers of fifty-nine journals. The Neurological Institute, through the courtesy of the editor of its Bulletin, Professor Charles A. Elsberg, presented the current numbers of sixty-two journals, and Dr. Elsberg personally presented 287 bound and 490 unbound numbers of journals. Dr. William J. Gies, the former editor of the Journal of Dental Research, gave 1,442 current numbers of journals. Professor Hans T. Clarke gave the current numbers of five journals. T. H. McKenna, Inc., gave twenty-two bound books and 236 unbound numbers of journals. G. E. Stechert & Co. gave 258 bound and 343 unbound volumes of earlier medical literature. Dr. Reginald Auchincloss made it possible to acquire a machine for the photographic reproduction of printed materials.

At the head of the list of the many publishers sending copies of their new books to the Library is, as usual, Columbia University Press, with a total of 136 volumes. Harcourt, Brace & Company came next with forty-four volumes. Institutions and individuals from whom one hundred or more pieces were received include the American Museum of Natural History, Alice Beer, Mrs. S. B. Elby, H. W. Howell, Harold J. Jonas, Ferdinand Sachs, Mrs. Markowitz, and Bertrand D. Wolf.

Gifts calling for special acknowledgment were also received from the Carnegie Endowment for International Peace, Carnegie Foundation, Columbia Broadcasting Company, Princeton University Library, Rockefeller Foundation, Rockefeller Institute, the Smithsonian Institution, Mrs. John Clyde Oswald, William E. Benjamin, D. Bevich, W. L. Bogert, Ann Bowman, Henry Goddard Leach, Montgomery Schuyler, Dr. D. C. McMurtrie, Robert Mountsier, S. A. Tannenbaum, and Judge J. M. Woolsey.

Officers and others associated directly with the University in some way, contributing twenty-five volumes or more and not mentioned above, include: President Butler, Dr. Reginald Auchincloss, Professor Arthur E. Bestor, Jr., Dr. Richard J. Bing, Professor Franz Boas, Professor James C. Bonbright, Dr. Samuel Cochran, Dr. Arthur P. Coleman, Dr. Jean Cor-

win, Dr. William Darrach, Professor A. Raymond Dochez, Professor James C. Egbert, Professor Haven Emerson, Professor Frederick B. Flinn, Professor Harold H. Gile, Professor Ross Golden, Dr. A. V. Hargett, Professor Houghton Holliday, Professor James W. Jobling, Professor John D. Kernan, Professor Paul F. Kerr, Professor Charles C. Lieb, Professor Samuel M. Lindsay, Professor Hastings Lyons, Professor Ewing C. McBeath, Professor Daniel Gregory Mason, Professor Emeritus John Dyneley Prince, Dean Willard C. Rappleye, Professor Henry A. Riley, Professor Lindsay Rogers, Professor Fordyce B. St. John, Professor Emeritus Edwin R. A. Seligman, Professor Carl S. Shoup, Professor Hans Smetana, Professor Arthur P. Stout, Professor Paul C. Swenson, Professor Frank Tannenbaum, Professor Kenneth B. Turner, Professor A. Ashley Weech, Professor Abner Wolf, Professor Robert S. Woodworth, and Professor Raymund L. Zwemer.

Some of the rare and expensive items received by gift or purchase each year are listed in the annual report not only to bring them to the attention of scholars, but also as a reminder of the existence of the rich collections to which they are added. For the same purpose mention might be made, if space permitted, of many accessions not necessarily rare or costly, but of high utility in the research work being carried on in many departments of the Library, such as the *Annuaire Didot-Bottin* in eight volumes, given to the business library by Mr. Bernard Blachere, the voluminous *List of References on Securities* prepared by the U. S. Securities and Exchange Commission, and the new edition of Nicklisch's *Handwörterbuch der Betriebswirtschaft*. In the same class was the gift of a 219-page report on taxation of government bondholders and employees with six volumes of appendices containing photostat copies of documents, periodical articles, etc., given to the law library by the U. S. Department of Justice.

New sources of historical data are now available to students in two newly acquired sets: The New York Journal of Commerce, 1837–42, the Shipping and Commercial List and New York Price Current, 1824–61. Outstanding additions to the Montgomery library of accountancy are the account books of the Moscha family of Pisa, 1332–1645; of Effingham Lawrence, a colonial merchant; and of Julius Mallinckrodt, a Dutch dealer in chemicals.

Several unusually important items of French economic literature have been added to the Seligman library, including manuscript writings of John Law, in three volumes; three unpublished manuscript volumes by Claude Dupin, entitled *Observations sur un livre intitulé, l'Esprit des lois;* and a fifteen-volume collection of minutes and memoirs of the Parlement of Provence dealing with the subject of French revenues in 1763.

The Library was fortunate in being able to purchase the private library of the late Edwin C. Kent, of Tuxedo Park, New York, consisting of some eight thousand volumes representing the book accumulations of four generations of the Kent family, beginning with Chancellor James Kent. Many of the law books owned by Chancellor Kent are already preserved in our law library in Kent Hall. Inevitably the acquisition of a collection of this kind involves some duplication, but it does add in important ways to the Library's resources in American and English literature and American history. Perhaps the most noteworthy item is the twovolume first edition of The Federalist (1788), profusely annotated by Chancellor Kent in such ways as to throw light on the question of authorship of some of the papers. Annotations in many of the volumes in the hand of the author of the famous Kent's Commentaries add greatly to the interest and value of the collection. The manuscript material includes autograph letters of Niebuhr, Madame de Staël, Van Buren, Sismondi, Andrew Jackson, Webster, and Clay, as well as the autographs of many others.

Among the important accessions by purchase may be mentioned the extremely rare first edition of Francesco Ghaligai's Summa de arithmetica (Florence, 1521) for the David Eugene Smith library, editions of 1548 and 1552 already being present in the Plimpton library; the rare second issue of the first translation of Euclid's Elements into French (Les sex premiers Livres des Elements d'Euclide, traduictz par Pierre Forcadel [Paris, 1566]); a three-page manuscript by Sir Isaac Newton, apparently an early draft of his Quaeries regarding the Word ὁμοουσιος (homoousios—of the same nature); an Italian manuscript (1552) treatise on astrology, with a section on occult writing; and twenty vellum documents containing source material for French history—five signed by each of the Louis's (or by his secretary) from Louis XIII to Louis XVI. The collec-

tion of historical mathematical instruments was enriched by an elaborate ivory sundial made by Hans Tröschel, one of the most famous instrument makers of his day, shortly before his death in 1612.

Among the more interesting additions to the law library were a scrapbook consisting of some 560 pages compiled and annotated by Sir Mathew Hale, judge of the common pleas under Cromwell and one of the greatest of the lords chief justice of England, containing original legal opinions by Sir Edward Coke and Sir Laurence Tanfield; records of various proceedings in Star Chamber, etc.; and two incunabula of legal interest: Conrad Summenhart's Septipertitum opus de contractibus pro foro conscientiae atque theologico (Hagenau, 1500 [Hain 15179]), the first edition of an important medieval work in the history of commercial law; and Johannes de Turnhaut's Incipiunt casus breues super totum corpus iuris ciui lis per Egregium virum magistrum Johanem Turnout alme universitatis louanien (Basel, 1480? [Hain 15686]), an early commentary on the Corpus Juris Civilis.

Outstanding purchases in the field of musical literature include: Hofmeister's Handbuch der Musikalischen Literatur (Leipzig, 1844–1933) and Jahrverzeichnis (Leipzig, 1860–1939); Archiv für Musikwissenschaft (Leipzig, 1918–27); Handbuch der Musikwissenschaft (Wildpark-Potsdam, 1928–34); and Zeitschrift für Musikwissenschaft (Leipzig, 1918–35). Music purchased included: Denkmäler der Tonkunst in Österreich (Vienna, 1894–1938); Denkmäler deutscher Tonkunst (Leipzig, 1892–1931); Das Erbe deutscher Musik (1935–); and Philippe de Monte, Opera omnia (Düsseldorf, 1930–35).

Coöperation between the University Library and the School of Library Service in the training of professional librarians has been strengthened and extended. Reference was made in last year's report to the employment of Library School students as "student assistants." That system continues to give satisfaction to all concerned in spite of certain inherent disadvantages, such as the relatively short term of service. Although many other libraries in and near New York are used for purposes of observation and study, our own libraries are the principal laboratory for certain types of library service. This normal and desirable coöperation is aided especially by service of members of the Library staff on the teaching staff of the School. Mr. Miles O. Price, Law Librarian, has continued to give his

Summer Session course on law library administration. Mr. Richard S. Angell, Music Librarian, gave a course on music library administration. Mr. Thomas P. Fleming, Medical Librarian, will give in the 1939 Summer Session a course in bibliographic and reference service in the medical sciences. For the students who take these courses, and for other library school students as well, these libraries serve as indispensable laboratories. In the past year the medical library accepted as volunteer members of its staff for varying periods of time three young women who desired to extend their experience and improve their skill in medical library service.

In the period from September 22, 1938, to June 6, 1939, 143 N.Y.A. students were assigned to twenty-six different departments of the Library. The average number on duty each month was eighty-six, and the total number of hours worked was 20,398. As in past years, reports vary greatly as to the value of such service. Much seems to depend on the type of work that can be assigned to them and the amount and quality of supervision that can be given. In spite of the unreliability, irregularity, and general inefficiency of most of these N.Y.A. students, the Library was able to use them to good advantage in the miscellaneous activities of many departments.

Miss Dorothy Hale Litchfield, head of the Reference Department of the University of Pennsylvania Library, a graduate of Bryn Mawr College and of the Drexel Institute School of Library Science, became a member of the Library staff on September 1, 1938, with three main responsibilities: supervisor of the Periodical Department; assistant in the office of the Director of Libraries, in charge of interlibrary loan work; and librarian of a newly established microfilm collection. Suitable rooms for the storage of films and their use by means of reading machines are available in South Hall adjacent to the periodical room. This new department is responsible for the administration of the rapidly growing collection of films and their use by readers.

The making of films for the Library's own collections, of manuscript and printed materials not available for purchase as well as films of material in the Library for other institutions and for individuals, has been developed rapidly during the year under the supervision of Dr. Mary A. Bennett. Much new apparatus has been acquired and a new microphotography laboratory has been constructed in a room adjacent to the photostat

room. The service of the Photograph Division has been expanded in several directions, though the bulk of its work continues to be the making of photostat prints, of which 14,215 were turned out during the year. The division is now equipped to do pictorial photography, both indoor and outdoor, to make enlargements from any kind of film or negatives, and to make lantern slides from 35 mm. film. This division is conducted on a self-supporting basis, the scale of charges being adjusted to cover the cost of labor and consumable materials and equipment.

Members of the staff of several departments have been active in professional library affairs. Miles O. Price, Law Librarian, served as chairman of the American Association of Law Libraries' Committee on Education for Librarianship, and Margaret E. Hall, Law Reference Librarian, served on the Association's Membership Committee. Miss Elizabeth E. Schramm, Miss Estelle Brodman, and Mr. John Connor, members of the professional staff of the medical library, held chairmanships in local or national associations. Mr. Thomas P. Fleming, Medical Librarian, was chairman of the American Library Association's Committee on Public Documents and a member of the Medical Library Association's Committee on Documents. Miss Rose Boots, of the business library staff, was president of the New York Chapter of Special Libraries Association. Mr. Walter Hausdorfer, Librarian of the School of Business, published in Special Libraries a revised edition of his survey of "Professional School and Departmental Libraries," which has now been reprinted.

A volume by Mr. Talbot Hamlin, Avery Librarian, Some European Libraries; Their Methods, Administration and Achievements, was published by Columbia University Press as the fifth number of a series of "Columbia University Studies in Library Service." Mr. Hamlin also gave ten lectures at the Metropolitan Museum of Art on the general subject of "Medieval Civil and Domestic Architecture." A paper he presented at a symposium held at the Baltimore Museum of Art in May, entitled "The Classic Revival in American Architecture," appeared later in a volume issued by the Johns Hopkins Press under the title The Greek Tradition.

Mr. Richard S. Angell, Librarian of the music library, was re-elected vice-president of the Music Library Association, served on some of its important committees, and published several articles in musical library periodicals.

Professor William L. Westermann, Curator of the papyrus collection, reports that the work on the Columbia Greek papyri has been continuing actively during the last year. Dr. Herbert Liebesny, a refugee from Vienna and a specialist on the legal aspects of the papyri, assisted in this work during the spring and summer of 1939. Professors Westermann and Keyes are bringing to a close the preparation for publication of the fourth volume of Columbia papyri, comprising the remainder of the Zenon papyri, in our collection. The new volume will contain about ninety documents, dating from the third century B.C., including economic and legal material of great importance. Professor Keyes has begun the preparation of a collection of tax accounts from the second century A.D. which will probably be published as Volume V.

Dr. Isaac Mendelsohn, who joined the Library staff in 1935 as a cataloguer of books in Near East languages, was appointed Curator of the Near East collections on January 1, 1939. Dr. Mendelsohn is the author of Legal Aspects of Slavery in Babylonia, Assyria, and Palestine (1922); his other published writings and bibliographical work are in the field of Oriental history and literature. A catalogue he has prepared of the Library's 500 cuneiform tablets is now ready for publication.

Mr. John H. Moriarty, Librarian of Cooper Union from 1934 to 1939, joined the staff as General Assistant on February 1, 1939, and was appointed Assistant to the Director of Libraries on May 15, with the special responsibility of assisting the Director in all matters relating to acquisition.

The end of the year brought the retirement of three well-known and popular members of the staff. Miss Harriet Beardslee Prescott, after graduating from Mount Holyoke Seminary in 1886 and working as a library school student and apprentice in the Columbia College library under Melvil Dewey, in 1889 entered the Cataloguing Department where she was to serve for fifty years, the last forty as its administrative head. In May her University friends and associates honored her by a reception in the rotunda of Low Memorial Library. At Commencement a University Medal for Excellence was bestowed upon her as official recognition of her long period of noteworthy service.

Mr. Ralph F. Miller, appointed Librarian of the College Study in 1910, retired, because of failing health, as the universally popular librarian of

Columbia College after twenty-nine years of service. On June 30, at the close of forty-one years of service in the Cataloguing Department, Miss Mary L. McClure retired from the position of Senior Cataloguer. Mrs. Anna Trenchard, who had served the School of Journalism and its library as Custodian of the Newspaper Clipping Service since 1912, was also retired at the close of the year.

The year has been one of stress and strain in nearly every department, caused by a work-load which seemed impossibly heavy, to which has been added a temporary burden of making adjustments to some necessary administrative reorganization and many changes in personnel. The Director of Libraries has noted with the greatest satisfaction the spirit in which the staffs of the various departments have faced the most trying situations and have worked together in harmonious coöperation to give the best possible service to the University community. Acknowledgment is gratefully made to the officers and staffs of various departments of the University for courteous and efficient coöperation, above all, perhaps, to the Department of Buildings and Grounds, the Bursar's Office, and the Purchasing Department. It is also a pleasure to acknowledge the generous coöperation of the Columbia University Bookstore in the purchase of books.

Respectfully submitted,

CHARLES C. WILLIAMSON,

Director of Libraries

June 30, 1939

## LIBRARY STATISTICS

				Increase
		1937-38	1938-39	or Decrease
Accessions				
Orders placed		14,697	13,662	-1,035
Serials checked		64,000	56,881	-7,119
Gifts				
Pamphlets and volumes		39,431	20,146	19,285
Exchanges				
Pieces received		8,973	3,979	4,994
Pieces sent out		13,276	12,653	-623
Volumes added				
General Library and departments		29,991	27,279	-2,712
Law library		9,005	8,010	<b>—</b> 995
Medical library		4,129	4,607	478
Avery library		1,303	1,674	371
Teachers College		4,307	5,698	1,391
Barnard College		2,369	2,697	328
College of Pharmacy		780	165	-615
contege of Financial Contents of the Contents				
Total		51,884	50,130	-1,754
Total Volumes in University Libraries on June	30	1,615,051	1,665,181	50,130
•				
CATALOGUING				
Cards made and filed				_
General library		67,069	70,365	3,296
Departments		106,702	96,109	-10,593
Replaced		10,924	8,338	<b>—2,5</b> 86
Depository cards filed		47,417	60,612	13,195
Total		232,112	235,424	3,312
10iii	•	232,112	23),424	3,3.2
Volumes catalogued		50,576	48,038	-2,538
Volumes recatalogued		20,418	25,568	5,150
Volumes lost or withdrawn		1,312	1,097	-215
D				
BINDING				
In Library bindery				198
Volumes repaired	•	2,709	2,907	-
Pamphlets bound	٠	15,692	11,722	<b>—</b> 3,970
Total		18,401	14,629	-3,772
10tat	•	10,401	14,029	- 3,7/2
Outside of Library				
Volumes bound or rebound		22,706	29,672	6,966
Total		41,107	44,301	3,194
CIRCULATION				
Volumes supplied from loan desk,				
including renewals		293,061	320,453	27,392
Volumes in libraries, loaned and used		1,845,367	1,872,966	27,599
· · · · · · · · · · · · · · · · · · ·				
Total Recorded Use of Libraries		2,138,428	2,193,419	54,991

## REPORT OF THE SECRETARY OF APPOINTMENTS

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

To the President of the University

SIR:

I have the honor to present a record of the work of the Appointments Office for the year ending June 30, 1939.

In this our forty-fifth year of organized employment activity no conspicuous records were achieved, yet steady progress was reported by all our divisions which, as you know, include among their numerous responsibilities student employment and senior, graduate, alumni, and teacher placement. While figures give only superficial evidence of the work of the Appointments Office, it is interesting to note that for the second successive year we have been a "million-dollar industry," placing over \$1,000,000 in the pockets of Columbia men and women through the medium of jobs.

During this year we have had on our active files 15,647 applicants, an increase of 1,610, or 10 percent, over last year's registration. A total of 8,547 positions of all kinds came to our attention; 14,964 interviews were arranged resulting in 6,840 direct placements. Although there was an encouraging 18 percent increase in full-time placements, the total number of jobs filled in all classifications is about 10 percent less than the previous year due to a slump in our part-time and summer placement figures which will hereinafter be explained.

Beyond describing in greater detail the above-mentioned placement activities, this report will touch upon several correlated activities and developments of the past year including our services to the New York World's Fair of 1939, the organization of the Engineering Alumni Employment Committee, a proposal for the extension of student clerkships, and a discussion of the operations of the student agencies.

While, in comparison with the record year 1937, our placement figures are unimposing, 1939 can be called a better year than 1938, even in the face of continuing chaotic business conditions. It is understandable that

the employment market parallels the tides of business. Thus, 1937 was the peak year of the uncertain nineteen thirties in both the business index and college placements. The year 1938 began with the most precipitous decline in business and employment activity ever experienced in this country. It was not until July after the graduation of the Class of 1938 that business began a steady upward climb. Only 25 percent of the class were employed in June, but the rally brought with it increasing calls from employers with the result that 95 percent of the class were in positions by the end of October.

History repeated itself with the Class of 1939. During the first half of this year another slump set in, dulling the enthusiasm of employers during the usual spring open season for college recruiting to the extent that less than 50 percent of the Class were in jobs by the end of June, the closing month covered by this report. Writing this report several months after

TABLE 1

RECORD OF PLACEMENTS, 1936—39

	fe	ration or yment		tions ered	Interviews		Positions Filled		
	1938- 39	1937- 38	1938- 39	1937- 38	1938– 39	1937- 38	1938– 39	1937- 38	1936- 37
Full-time									
Men	3,339	2,601	915	978	3,043	2,407	263	186	284
Women	2,875	2,683	404	484	999	1,059	187	193	217
Total	6,214	5,284	1,319	1,462	4,042	3,466	450	379	501
Teaching	2,956	2,384	54 <b>2</b>	530	931	1,065	130	124	154
Part-time School Year			/						
Men	1,837	1,967	3,389	3,950	4,748	5,716	3,176	3,745	4,123
Women	1,857	1,499	1,577	1,627	1,772	1,884	1,561	1,605	1,619
Summer									
Men	1,566	1,609	1,097	1,484	2,649	2,833	925	1,153	1,037
Women	1,217	1,294	623	622	822	822	598	592	557
Total	6,477	6,369	6,686	7,683	9,991	11,255	6,260	7,095	7,336
Grand Total .	15,647	14,037	8,547	9,675	14,964	15,786	6,840	7,598	7,991

TABLE 2 EARNINGS REPORTED TO THE APPOINTMENTS OFFICE

	Through Appoint- ments Office	Through Own Efforts	Total	
Full-time				
Men	\$347,302.00		\$347,302.00	
Women	208,380.00		208,380.00	
Teaching	197,278.00		197,278.00	
Total	\$752,960.00		\$752,960.00	
Part-time				
School Year				
Men	\$150,995.17	\$58,863.91	\$209,859.08	
Women	71,798.86	42,330.77	114,129.63	
Summer	}			
Men	42,703.91	37,192.38	79,896.29	
Women	25,773.58	10,956.83	36,730.41	
Total	\$291,271.52	\$149,343.89	\$440,615.41	
Grand Total	\$1,044,231.52	\$149,343.89	\$1,193,575.41	

June 30, I note with satisfaction that the Class of 1939, like its predecessor, was 95 percent placed by November after Commencement.

Even though Columbia graduates had their fair share of success in the job market during the thirties, positions were difficult to find, and college graduates often took whatever they could in order to acquire useful experience, hoping later to uncover the right kind of job to absorb their full interests and capacity. Except in rare cases, advancement in pay and position was slow and, too often, there were salary cuts and lay-offs. The net result of the economic buffeting of the thirties is that a large proportion of the college graduates of this period have not yet found themselves and are looking to the forties for their real future. They may not find booming prosperity in this new decade, but there will be ample opportunity for those who are prepared through training and experience to consolidate the gains and recoup the losses of the experimental thirties. Contradicting those who say there are no more frontiers for youth, I maintain that there is a challenge to our present college generation in this next decade which is itself a new frontier of opportunity.

Our year's activities were punctuated by busy days supplying personnel to the New York World's Fair of 1939 and its exhibitors. Close to three hundred Columbia men and women were engaged to serve in varying capacities from attendants to lecturers. This rare opportunity to participate in the operation of the largest fair ever held was looked forward to by our students with enthusiasm and anticipation. The experience of direct contact with major industries and visitors from all over the world was, in itself, an education.

We are now looking forward to the 1940 Fair and another opportunity to be helpful to the Personnel Department of the Fair and its genial director, Mr. C. L. Lee, as well as our good friends the exhibitors who include the following, listed in the order of the number of students employed by them in 1939:

The World's Fair Organization
The Ford Motor Company
American Express Concessions, Inc.
The du Pont Company
Childs Restaurants
Exposition Souvenirs Corporation
Elgin Watch Company
New York Fair Tours, Inc.
The Borden Company
Westinghouse Corporation

General Motors Corporation Baker & Company, Inc. Fordyce & Webster American Pottery Exhibit Old New York Exhibit B. F. Goodrich Company Richardson Corporation New York Zoölogical Society Art Aid Corporation

The University showed its interest in the World's Fair by appointing a committee which planned a University Guide and Information Service and prepared an illustrated souvenir folder for distribution to visitors. The Guide and Information Service was organized by the Appointments Office and was quartered in the McMillin Academic Theater lobby where it began active operation in June of 1939.

Placement of the graduating lawyers has been a slow process for years, and now the situation seems to be growing worse instead of better. The 1939 Law class encountered even fewer opportunities than usual, due primarily to the slackness of the law business generally. The situation that finds only a small percentage of the class placed by Commencement should not discourage the rest of the class, however, because it has been our experience that it takes about six to eight months after graduation before the majority find positions. Many law firms will not take new

graduates until they have passed the Bar examinations and been duly admitted, while others even demand some experience which might have been acquired in a summer vacation clerkship. The solution of our law placement problem lies, I am certain, in a return of more prosperous times. Until then, it would be a kindness to the profession and to the young law graduates if law schools generally would reduce their enrollments appreciably and admit much more selectively.

We are finding an increasing demand among employers for the "five-year engineer" with the professional degree, primarily because of his broader training. As a consequence, we were fortunate in placing a large proportion of the 1938 engineering class before graduation, and this held true for the Class of 1939. Our small groups of mechanical, metallurgical, industrial, and mining engineers were 100 percent placed by the end of June, and more than half of the electrical and chemical engineering classes were in jobs by the same date.

Along with the demand for engineers came requests for research chemists and physicists, several of whom were placed in very attractive positions with major companies.

This year saw the organization of a Committee on Employment as a subcommittee of the Columbia Engineering Schools Alumni Association. Formed in June, the committee plans to work through the facilities of the Appointments Office, acting as a clearinghouse for information about engineering positions that are open and alumni who are unemployed, or who are employed and looking for better opportunities. It is expected that a large number of Columbia engineering graduates will register their names with the committee and thereby strengthen its services to employers who may now look to Columbia as a source for experienced men. Toward this end, a letter announcing the plan and enclosing a registration card was mailed to all engineering alumni in June. The plan is to send out bulletins announcing jobs and available engineers. This new committee should prove a valuable activity of the Engineering Association, and will unquestionably strengthen the position of the University Appointments Office with employers since we shall now have an important reservoir of trained engineers to draw upon for recommendations. The members of the Committee on Employment are: Robert A. W. Carleton, '04E.; Henry C. Carpenter, '99E.; Milton L. Cornell, '05E.; Darwin S. Hudson, '01E.; Charles P. Davis, '22E.; Roger L. Wensley,

'16E.; David Moffat Myers, '01E.; Percy E. Landolt, '12E.; Edmund A. Prentis, Jr., '06E.; Edward J. Frieble, '33E.; and Robert F. Moore, Secretary of Appointments.

The permanent placement of women is under the direction of Miss Ruth Callan, who is in her fifteenth year with the Appointments Office. In this division there has been an increase over last year of 7 percent in registration, a decrease of approximately 17 percent in positions offered, and a slight decrease of 3 percent in the number of positions filled.

Like our other divisions, the Women's Division has rendered important service to employers and applicants by maintaining an up-to-date file of credentials and references. Last year over a thousand sets were sent out to employers, resulting in favorable decisions for many of our candidates. Often these were mailed at the request of the registrant to employers to whom they had been referred by sources other than the Appointments Office. When this service has resulted in an offer of a position we like to feel that we have been an important factor in the favorable decision, although we make no attempt to write this effective placement activity into our statistical record. Perhaps we should in another year provide a supplementary table which will record these "assists."

Our Women's Division continues to give valuable service to the University's departments and officers, as well as downtown organizations, in recommendations of University-trained women for secretarial, research, clerical, and numerous other types of openings. One very bright spot in the record of this division last year was the 100-percent placement of the School of Journalism women due partly to our efforts and partly to the ability of the graduates to find their own jobs.

Occasionally we hear of a department of the University using outside agencies when it needs help. There is no reason why any University officer or department should not make as much use of the University Appointments Office as they do of the Purchasing Office, the Registrar's Office, or the Bursar's Office. After all, we are equipped to supply any kind of personnel and, if we do not have on our own files a qualified candidate, we are in touch with the best sources and can be useful as a preliminary interviewer. In view of the above, definite steps will be taken during the coming year to inform our University family concerning the full extent of our services.

Our teacher-placement activities headed by Miss Margaret Morgan,

who has been in the service of the Appointments Office for twelve years, are confined to teaching and administrative positions in the college, university, and preparatory school fields. Those seeking positions in the secondary school educational field are referred to the Office of Placement Service at Teachers College.

The Teaching Division shows a very heavy increase in registration of over 500 candidates, apparently due to our efforts at wider publicity concerning our teaching placement facilities. A total of 542 positions, twelve more than last year, was offered, resulting in 931 interviews and 130 appointments, six more than last year. We were called upon to prepare and send out 1,773 sets of credentials.

If our placement figures are indicative of anything other than the good fortune of our candidates, it would appear that the most active teaching fields last year were, in the order named: English, economics, modern languages, history, sociology, psychology, chemistry, and government. The new field of radio has appeared on the horizon and is becoming popular. We are receiving requests for people who can teach the technical phases of radio, such as acoustics, script writing, and broadcasting.

The advisory services of the Teaching Division cannot be accurately tabulated, yet an increasing number of students are making use of our large store of information concerning fellowships and assistantships and of our file of college and school directories, catalogues, and government bulletins.

Before reporting on the student employment divisions, I should like to refer to an interesting paragraph out of the report of 1895 brought to my attention by Mr. Roger Howson, who is engaged in writing a history of Columbia University, to the effect that: "In many places a needy student is able to earn a considerable part of his expenses by outside labor. In New York this is more difficult and must be done at a considerable loss of caste."

Mr. Howson suggests that this is certainly not true now, and asks when the change occurred. His assumption that times have changed is vindicated by the fact that at Columbia 65 percent of our College students are listed as working students who earn a part of their college expenses. Socially and scholastically, working students rank along with all their classmates. In fact, it can be safely stated that this is a preferred group when the matter of seeking a place in the world's work confronts seniors

upon graduation. Typical of many employment application blanks is the question, "What proportion of your college expenses have you earned?"

I do not feel capable of stating the definite turning point when the working student came into his own socially on the college campus, but the following figures concerning the growth in numbers of students registering for employment from 1895 to the present may be significant:

TABLE 3

RECORD OF STUDENT EMPLOYMENT, 1895—1939

Year	College Enroll- ment in the United States	Registration for Part-time and Summer Work	Placements	Earnings through Appointments Office
895		32	18	\$2,511
901	168,000	55	35	4,977
1905	199,045	537	234	43,032
1910	266,654	628	1,010	39,054
1915	303,233	981	1,266	37,253
1920	517,166	1,899	1,745	130,929
1925	734,402 <sup>a</sup>	3,165	3,280	no report
930	1,085,799	5,010	5,543	no report
935	1,062,760	5,809	6,806	no report
1939	1,350,000 <sup>b</sup>	6,477	6,260	\$291,271

a 1924. b Estimated.

The above figures indicate that the turn of the century saw a gradual change of feeling toward the working student, whose numbers were steadily increasing along with increases in college enrollment, and that this change became a permanent thing after the World War, and has since continued through the great depression of the thirties.

As a contrast to 1895, a discussion of the past year's student employment activity is enlightening. There are two divisions in student employment with Miss Mary A. Wegener, the Assistant Secretary of Appointments, in charge of the Men's Part-time Division, and Miss Ethel Callan in charge of the Women's Part-time Division.

In the division headed by Miss Wegener, in her twentieth year with the office, 963 students filled 4,101 jobs and reported earnings of \$193,699.08 through the Appointments Office, and \$96,056.29 on their own, for a total of \$289,755.37. There was a decrease from the year previous in the num-

ber of jobs offered and of placements, but the total amount earned by students was approximately the same, due perhaps to the increased success of the student agencies.

For the summer of 1028 there was a decided falling off of opportunities

For the summer of 1938 there was a decided falling off of opportunities for employment on and off the campus with a consequent decrease in placements.

TABLE 4

PART-TIME AND SUMMER PLACEMENTS

June 1, 1938–May 31, 1939

	Registration	Positions	Interviews	Positions Filled		
	Registration	Offered		Steady	Temporary	Total
Summer						
Men	1,566	1,097	2,649	488	437	925
Women	1,217	623	822	200	398	598
School Year						
Men	1,837	3,389	4,748	1,355	1,821	3,176
Women	1,857	1,577	1,772	444	1,117	1,561
Total	6,477	6,686	9,991	2,487	3,773	6,260

Although termtime employment, according to the statistics, apparently fell off, actually we have filled the same number of jobs. The difference of over 500 jobs filled results from a new plan for handling Baker Field jobs during the football season. Instead of assigning men by single games, we make assignments for the season, the same men serving at all games and the count of jobs being thereby decreased. There are ten activities at Baker Field that employ an average of 400 students a game as ticket sellers, ticket takers, advance guards, program salesmen, student police, ushers, parking attendants, refreshment stand workers, scoreboard men, and press and radio assistants.

The main sources of employment were the dining halls, the libraries, the Bookstore, the Residence Halls offices, the student agencies, National Youth Administration, and miscellaneous jobs, for example: tutoring, companionships, downtown office positions, department store jobs, market research, speaking assignments, legal investigation, and laboratory assistantships; and the usual summer camp and hotel jobs.

So much preliminary preparation for the World's Fair was made during the year under review that brief mention of plans and accomplishments may properly be included here, leaving the statistical count to be recorded in our 1939–40 report. Following publicity and correspondence sent to the exhibitors and the World's Fair management, we were asked to make recommendations to twenty-eight organizations, resulting in the placement of about 169 men students in a variety of positions.

Another windfall of opportunities for 1939 summer work, also to be counted in our next report, came from the United States Department of Agriculture who requested students for the fight on the Dutch elm disease. About one hundred students were assigned as "tree scouts" to squads operating in New York, New Jersey, Pennsylvania, and Connecticut. The work offered healthful outdoor exercise, and opportunity for valuable service and a chance to earn from \$200 to \$250 for the summer.

Among the year's unusual opportunities were: requests from a travel agency for cruise assistants on a West Indies cruise at Christmas and a South American cruise at Easter; a request from Norman Bel Geddes, who engaged eight architectural students as draftsmen on the Futurama of the General Motors building for the World's Fair; occasional calls from March of Time for students to work as actors in several of their news films; the valued opportunity of supplying the ushers for the championship tennis matches at the West Side Tennis Club, Forest Hills; several requests to supply entertainment for parties for which our campus magicians, ventriloquists, and musicians were in popular demand; a call for five college men models for a style show; photographic models for advertising; a call to supply an "enthusiastic audience" for a dedicatory ceremony; calls for contest essay readers and judges; for an architectural student, a remodeling job on an old Pennsylvania farmhouse; a propaganda stunt requiring two older students in old-fashioned dress to drive about the Battery; for a botany student, an assignment to identify weeds of Long Island; and the privilege of supplying the entire service staff for the summer resort at Point o' Woods on Fire Island. Were it not for lack of space, numerous other interesting jobs that would fill a book could be mentioned.

Student enterprise, as represented by twelve student agencies, has provided increasing opportunities and substantial earnings in the amount of

\$13,733.22 for 218 students. Not only do these agencies give the students a chance to earn part of their college expenses, but, of equal importance, they give them a business experience that is very closely related to actual business conditions. These agencies are supervised by the Appointments Office, and the students compete for the managerships starting with their sophomore year. While not the oldest student agency, the Laundry Agency is the model of efficiency, setting the pace and example for the others.

There have been two new agencies added to the list this year, a Student Service Agency and a Student Social Agency. The former provides a clearinghouse or an exchange for student services in the dormitories, such as typing, tutoring, repair work of all kinds, sale of corsages and the like; while the latter is an agency which sells due bills on hotels and restaurants and night clubs. It is too early to know how successful these agencies will be, yet they have shown interesting possibilities of development.

Proposed and in the process of organization, to operate during 1939–40, are five new agencies, including shoe repairing, University calendar, stationery and printing, phonograph recording, and newspaper delivery. These proposals came from the students themselves, whose ideas we like to encourage if there appears to be any likelihood of a successful student enterprise being established.

TABLE 5 student agency earnings, 1938–39

Number of	
Student Agency Students Participat	ing Earnings
Laundry Agency	\$ 4,247.15
Bard Hall Agency	2,034.00
Magazine Agency 6	343.30
New York Times Agency	960.54
Herald Tribune Agency 9	443.81
Baker Field Food Concession 105	3,470.37
Football Program Sales Agency 64	1,291.05
Blotter Agency	400.00
Freshman Blue Book Agency 2	113.00
Social Agency	75.00
Service Agency	205.00
Cigarette Concession	150.00
<u> </u>	<del></del>
Total	\$13,733.22

Last year I mentioned the growing need for more opportunities of a steady part-time variety, and suggested the establishment of "working scholarships." A small beginning was made possible by the allotment of \$900 which provided emergency assistance to fourteen students in amounts varying from \$30 up to \$150. Also our plan was given impetus by the reclassification of many jobs already in existence in several departments of the University, and the addition of the Information and Campus Guide Service for the World's Fair. Prospects are that this plan will continue to develop. In fact, we have in view for the coming year a much larger sum to be expended upon its extension. Since the idea is taking on the semblance of permanence, we have decided to call it the "Student Clerkship Plan" and to call the jobs to which students will be assigned, "student clerkships."

Last year's report carried the suggestion, "It is possible that an alumnus who, as a working student, was helped by the University Appointments Office, or a reunion class might interest themselves in endowing 'working scholarships.' "That suggestion still stands, and we shall welcome gifts of sufficient funds to allow us a real start on this program. Ideally, a student clerkship should have a minimum value of \$200 and a maximum of \$500, or enough to take care of the items of either board or room or both combined.

These student clerkships may be provided for in other ways besides the donation of money. Keeping in mind the ideal of supplying worth-while work experience and, at the same time, providing funds for the alleviation of the economic difficulties of self-supporting students, there are other suggestions that would help along the plan, namely:

On Campus.—The creation of new part-time job opportunities by the special assignment of existing departmental work, under the Student Clerkship Plan, the funds to come directly from the department. These departments will be given first call on the services of additional student clerks whose pay will not be charged to the department but will come from the special Student Clerkship Fund.

Off Campus.—Alumni who are employers, and other employers who are friends of Columbia or otherwise interested in helping deserving college youth, may wish to establish student clerkships in their companies which would call for work on a part-time basis for which the company

itself would provide the funds. Such an opportunity would be a prize for any student because it would give him first-hand contact with the environment and procedures of the workaday world. Consider the great value to a banking student to be able to work part time in a bank; or to an economics student to be able to get experience in some sort of marketing organization; or to a pre-lawyer to work in a lawyer's office; or to a preengineer to work in industry.

The possibilities of the Student Clerkship Plan are interesting and inspiring. From a small start this year, we hope to enlist the enthusiastic and tangible support of alumni, employers, University officers, and others.

Miss Ethel Callan, who has been with us nine years and who is in charge of student employment for women, reports that the year has not been exceptionally good or bad. Against a 10 percent increase in registration, there was a slight decrease, about 2 percent, in positions offered and placements. On the other hand, there was an increase of 1 percent in summer placements, although earnings were off considerably due to the lower salaries that prevailed during the summer of 1938. Women students reported total earnings of \$150,860.04 of which \$97,572.44 was earned through the Appointments Office. One noticeable, encouraging trend is the increase of 3 percent in the number of steady part-time jobs. Considering the number of self-supporting students on our rolls, the need for continually increasing steady part-time employment opportunities is urgent.

Among the jobs which have come in during the course of the year there have been certain amusing and unusual ones. A call came from an old lady of eighty-four who wanted a mathematics tutor because she was afraid her grandchildren were doing her out of her money and thought that if she learned the fundamentals of mathematics, she could check her financial affairs more closely. In the same suspicious mood, a young debutante, studying at a well-known private school, asked for a tutor in investment finance. She didn't trust her lawyer. One woman who has contacted us for eight years for tutors called us thirteen times during the year. She has a very bright, only daughter, and the mother is so afraid that she will not be at the top of the class in every subject that she phones for a tutor on all occasions. Many calls came in for English tutors for various foreign commissioners to the New York World's Fair.

This division had the privilege this year of demonstrating the versatility

of our services to the Registrar's Office during the registration period. Previously, the Registrar's Office had used outside organizations for the typing of course cards, but it was decided in February to try a new plan whereby the Appointments Office took the responsibility of recommending, in coöperation with the Department of Stenography and Typing, advanced students from the secretarial course supervised by an older experienced woman, also from our files. The new plan worked so well that the trial period is now over, and we may count this as a regular service of the Appointments Office. This has meant a saving to the Registrar's Office in money, experience for the secretarial students, and a further opportunity for the Appointments Office to make itself more useful to the University. We are indebted to the Registrar's Office for the opportunity, and to the Department of Stenography and Typing for its effective coöperation.

The Women's Division received many calls from the New York World's Fair, filling ninety-three positions, eighty-three of which were with the World's Fair organization as personnel assistants, secretaries, hostesses, cashiers, and guides; and ten of which were with exhibitors.

The guidance functions of the office followed the same pattern as last year. The Vocational Bookshelf was expanded, personal interviews on vocational problems were discussed with many students and alumni, and we participated actively in the annual Occupational Conferences.

The Occupational Conferences, supervised jointly by the School of Business and the Appointments Office, are directed by a student committee which last year was headed by Mr. Walter J. Ancker, '39 Bus., as general chairman. Mr. H. Lloyd Taylor, Jr., '39 College, and Miss Barbara Ann Denneen, '39 Barnard, were chairmen of their school subcommittees. Included in the committee were: from the School of Business, Alfred Hanssen, '39; Carl Wittrich, graduate student; Edward Gutman, '39; Mabel MacKay, '39; and James Biggart, '40; from the College: John Wright, '39; Charles Schneer, '40; Leonard Evans, '40; Edward Ethell, '40, and Edward Burke, '40.

Run after the fashion of the town meeting, these Occupational Conferences continue, more effectively each year, to provide a valuable approach for students to the realities of business life. Participating in our meetings this past year were the following counselors to whom we extend

our deep appreciation for the practical and helpful advice they gave to our students:

For the Conference on "Six Ways to Find a Job," held on February 9 and 16: Chairman, Paul W. Boynton, employment supervisor of the Socony-Vacuum Oil Company. Leonard Evans, '40, and Richard S. Jenkins, '39, were "applicants" in the practice interviews.

For the Retailing Conference on March 3: Chairman, James L. Fri, Toy Manufacturers of the United States; Charles S. Neale, '24, Stern Brothers; Edward O'Rorke, R. H. Macy & Company; and E. S. Pratt, of E. S. Pratt and Company.

For the Advertising Conference on March 16: Chairman, Gilbert Goold, '26 Bus., of Barton and Goold; Henry E. Obermeyer, '21 J., advertising manager of the Consolidated Edison Company; and Richard Holbrook, of Batten, Barton, Durstine & Osborne.

For the Federal Bureau of Investigation Conference on April 3: Special agent Dwight Brantley.

For the Industrial Relations Conference on April 13: Chairman, Professor Paul F. Brissenden; C. R. Dooley, Socony-Vacuum Oil Company; John D. Moore, Commissioner, New York Labor Relations Board; Ernest B. Lawton, '13, R. H. Macy & Company; and Mark Lauter, National Labor Relations Board.

For the Aviation Conference on April 17: Cadet Spencer F. Weaver, U.S.N.R.

For the Accounting Conference on April 27: Chairman, Duncan Merriwether, '28 Bus., Rohm & Haas Company; J. S. Seidman, Seidman & Seidman; and Clay Rice Smith, '28 Bus., National Lead Company.

The Conference Committee is indebted to Dean Charles S. Williamson, Director of Libraries, for his courtesy in supplying mimeographed reading lists of books and directories for reference reading on the occupations under discussion.

One pleasant sidelight on the results of the conferences was the employment of Walter J. Ancker by the Socony-Vacuum Oil Company as a result of his meeting with Mr. Boynton at these sessions.

This past year we organized a Central Records Department with Miss Leonora McClure in charge. This development in our organization has provided for a centralized file of the credentials of all divisions of the office, with a cross reference on those who are registered in two or more of our divisions at once. The establishment of this division has made it possible for us to maintain much more accurate and up-to-date information concerning our registrants. These files are cumulative beginning with a person's first registration with the office for part-time work and are maintained through his or her University career until the time placement occurs. Containing the academic record, references of professors and employers, and correspondence and reports to the office by the registrant, the cumulative record folder is very close to being a true mirror of the actual character and ability of the student and, consequently, helpful to us in strengthening our recommendations.

While many colleges are just now getting to the point of installing placement bureaus, and others are still debating seriously the question of centralized versus decentralized placement procedures, the University Appointments Office extends our thanks to all our associates whose co-öperation has made possible the successful operation of our centralized bureau. In particular, it has been a pleasure to work with the several deans, department heads, and administrative officers, with special mention of the helpful coöperation of Professor James P. Gifford, executive secretary of the Law Clerkship Committee; Miss Anne D. Hynd, secretary of the School of Business Faculty Committee on Employment; Professor Herbert Brucker and Professor Eleanor Carroll of the Dean's office, School of Journalism; Mr. Nicholas McD. McKnight, Associate Dean of Columbia College; and Mr. A. Dexter Hinckley, Assistant to the Dean of Engineering.

In addition to the administrative staff of the Appointments Office, heretofore named, are the following members of the secretarial and clerical force who have served during the year under review: Lillian Marlowe, Josephine J. Penn, Barbara E. Gray, Leonora McClure, Carolyn R. Grant, and Margaret Blodgett. To all I wish to express my thanks and appreciation of work well done.

Respectfully submitted,

Robert Foster Moore, Secretary of Appointments

December 30, 1939

## REPORT OF THE REGISTRAR

FOR THE ACADEMIC YEAR ENDING JUNE 30, 1939

AND FOR THE SUMMER SESSION OF 1939

To the President of the University

SIR:

As Registrar of the University, I have the honor to submit the following report for the year ending June 30, 1939, and for the Summer Session of 1939.

During the year beginning July 1, 1938, there were enrolled at Columbia University 32,240 resident students as compared with 32,619 in the year preceding. The enrollment under each of the main divisions is shown as follows:

Division	Men	Women	Total
Undergraduate, graduate, and professional schools University Classes (University Extension) Summer Session, 1938	3,070	9,084 2,330 8,382	17,485 5,400 11,822
Total	14,911	19,796	34,707

There were within these divisions 2,467 duplications of which 2,377 represented students of the Summer Session who returned to the University in the Winter or Spring Sessions following.

With 11,822 in the Summer Session, 19,014 in the Winter Session, and 17,517 in the Spring Session, the aggregate session-registrations numbered 48,353.

Three thousand, four hundred and two not included above received instruction as nonresident students in University Extension as follows: 758 in special courses and 2,644 in extramural courses.

In the division consisting of undergraduate, graduate, and professional schools 7,781 or 44.18 percent were residents of Greater New York; and 431 or 2.45 percent were from foreign countries. Students came from every state of the Union, from four territories, and from sixty foreign countries.

During the academic year, 5,149 individuals received 5,205 University

degrees and diplomas in course, 5,027 completing courses leading to one or more degrees, exclusive of 25 degrees awarded as of dates prior to 1938–39.

Within the Corporation, exclusive of the schools of Medicine and of Dental and Oral Surgery, 3,720 resident courses were conducted with aggregate attendance of 91,929 as follows:

Division	Number of Courses	Aggregate Attendance
Undergraduate, graduate, and professional schools University Classes (University Extension)	1,755 848 1,117	47,108 15,624 29,197
Total	3,720	91,929

a Includes courses offered at Teachers College and at Union Theological Seminary.

To continue the survey started in 1915 there is presented a tabulation of graduates of Columbia College who within the past five years have gone forward into more advanced study at the University, professional or graduate. The Annual Reports for 1920 (page 252), 1924 (page 298), 1929 (page 459), and 1934 (page 433) furnish similar statistics for the earlier periods.

Of the 7,846 graduates of Columbia College within the past quarter century 4,697 or about 60 percent have entered upon advanced studies in the several schools or faculties of the University. The ratio for each of the twenty-five years is given as follows:

Year	Percent Yea	r P	Percent
1915	 65 192	3	65
1916	 61 192	9	58ª
1917	 66 193		68
1918	 67 193		63
1919	 60 <sup>a</sup> 193	2	61
1920	 69 193,	3	52
1921	 68 193.		46a
1922	 66 193	5	54
1923	 59 193	5	54
1924	 63 <sup>a</sup> 193	7	55
1925	 62 193	3	52
1926	 64 193	9	46a
1027	 62		

<sup>&</sup>lt;sup>a</sup> The apparent drop in the ratio for each fifth year is due to the fact that it does not include those who might have gone forward subsequent to compilation of the periodical tables. Otherwise the percentages would come closer to the level of the average for the preceding four years in each case.

PROPORTION OF COLUMBIA COLLEGE GRADUATES GOING FORWARD TO UNIVERSITY WORK, PROFESSIONAL OR NONPROFESSIONAL, FOR THE FIVE-YEAR PERIOD 1935-39

o l	$p_{10}L$	888 888 226 229 19 104 1 1	856	795	1,651	51.8	99
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For 1	By Professional Option	6 6 6 1 119 119 119 119 119 119 119 119	325	:	:	:	
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	Projessional Opiion	3,7 2, 1 3, 1 3, 1 3, 1 3, 1 3, 1 3, 1 3, 1	07	:	:	:	:
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	IntoT		174	144	318	54.7	17
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	By Professional Option	17.42.42.0	70	:	:	:	::
		A. Graduates Going Forward to University Work Architecture Businces Businces Businces Graduate Faculties Journalism Law Law Labrary Service Medicine Optometry Pharmacy Teachers College	Total	B. Graduates Not Going Forward to University Work	C. Total Graduates	D. Percent Going Forward to University Work	Item B Includes a Few Graduates Going Forward to Uni- versity Work as Follows: University Extension Summer Session

<sup>a</sup> The apparent drop in the ratio for the fifth year is due to the fact that it does not include those who might go forward subsequent to compilation of this table after a lapse of one or more academic sessions.

## Office Staff 1938-39

Richard C. Bain Nancy D. Baines Mary Bilyeu

John C. Coffee (Evening Clerk)

Gladys Decker

Madeline E. Dignus (Assistant to the Registrar, School of Dental and

Oral Surgery) Gertrude H. Finan Mae L. Fitzsimmons Frank Gaffney Grace Grant Jessie Grof Lillian A. Kana Iva Kempton Jean Kennedy

Dorothy Kiefer Gladys M. Lindsay Mary Marsh Eva C. Marshall

Viola I. Martens (Resigned)

John P. Northcott Frederick Orr Margaret Polsten Madeline Scully Mary B. Timm Florence Van Veen Lucile Wetzel (Resigned) Donald P. Whitaker Martha M. Wylie Beatrice M. Young

The usual statistical material is presented in the following tables showing enrollment, class attendance, degrees conferred, geographical distribution, etc.

Respectfully submitted,

EDWARD J. GRANT, Registrar

September 1, 1939

#### TABLE I

## REGISTRATION IN COLUMBIA UNIVERSITY IN ALL FACULTIES DURING THE ACADEMIC YEAR 1938-1939

### I. Resident Students

Faculties	First Year	Second Year	Third Year	Fourth Year	Non-Candidate	Graduate	Total	New Students	Percentage of New Students
Undergraduate Students	1	ì	i	İ	ı	i	1	1	
Columbia College	536	461	424	305	1 7			584	31.88
(Professional Option Seniors) <sup>a</sup>	1	۱	١	l (aa)			(99)		_
Barnard College(Professional Option Seniors) <sup>a</sup>	236	193	179	176			952 (3)	363	38.01
II II. I 1	ı								32.28
(Professional Option Seniors)							(3)	41	32.20
Bard College	22	30	27	30	2		111	27	23.28
(Professional Option Seniors) <sup>a</sup> (Professional Option Seniors) <sup>a</sup>			l	(5)			(5)	-/	-3.20
Total Undergraduates								1,015	33.50
Total Undergraduates(Professional Option Seniors) <sup>a</sup>			l				(110)	-,5	33.3-
Graduate and Professional Students	l		i .	l					
Graduate Faculties <sup>b</sup>		٠,٠				3,178	3,178	1,262	39.71
Law	180	167	130		13			192	
Medicine	108	105	105	88	27				37.47
Engineering					28	67	172 295		60.47 54.58
Architecture	109	39	32		6				31.25
Journalism					4		62		
Business	112	TTI			69		568	290	
School of Dental and Oral Surgery Dental Hygiene	50	52	45	51	37		235		30.64
Dental Hygiene					53	;;	53	52	98.11
Library Service.			• • •		130	66	1 75	238 48	
Optometry	40	01		T 602		5,847	7,983		44.04 35.29
New College	68	37	30	1,092	444	3,04/	195	67	34.36
New CollegePharmacy	37	52	111	35		6			
Total Graduate and Professional Stu	donte								
Deduct duplicates <sup>d</sup>	uemis.		• • • •		• • • • •	• • • • •	<i>14,692</i> 127	3,709	30.00
Total Undergraduate, Graduate, and	Profes	cion	al S	tudont			17,485		
University Classes (University Extension	n) at t	he I	Iniv	ersity.			5,400	3.153	58.39
Total							22,885	35-33	337
Deduct duplicates		 					90		
Net Total Winter and Spring Session									
Summer Session, 1938							11.822	4.768	40.33
Total							34,617		400
Deduct duplicates (see Table IV)		 					2,377	1	
Grand Net Total, Winter, Spring, an	id Sun	ımer	Ses	sions.			32.240		
							J- 5- 70	1	
II. Nonresident Students in	Unive	rsity	Ext	ension		1.			
Students in extramural courses given wi	th or v	vithe	out	acaden	nic cre	ait	2,644		
Students in special courses given withou									
Total							3,402	1	

 $\it a$  Seniors exercising a professional option are included only in the totals of the respective professional schools as follows:

	Columbia College	Barnard College	University Undergraduates	Bard College
Architecture		1	_	
Business	15		• •	3
Dentistry	2			
Engineering	61		1	
Law	16	I	2	2
Medicine	5	I		
			_	_
Total	99	3	3	5

There are, besides, 15 Columbia College seniors exercising such option at professional schools elsewhere as follows: Cornell University Medical College, 2; Georgetown University School of Medicine, 1; Harvard University Medical School, 1; Long Island College of Medicine, 1; New York Medical College and Flower Hospital, 2; New York University College of Medicine, 7; Union Theological Seminary, 1.

Also 4 University Undergraduates: Cornell University Medical College, 1; Clong Island College of Medicine, 1; The Thomas W. Evans Museum and Dental Institute, 1; New York University College of Dentistry, 1.

b The total 3,178 does not include 460 candidates for a higher degree enrolled in the Summer Session only. c Does not include 4,544 candidates for a higher degree enrolled in the Summer Session only. d Students who transferred at midyear from one school of the University to another.

TABLE II registration of resident students by sessions, 1938–39

	1938					
Faculties	Summer Session	Winter Session	Spring Session	Gross Totals		
Undergraduate Students						
Columbia College	140	1,689	1,645	3,474		
Barnard College	64	919	897	1,880		
University Undergraduates	29	108	105	242		
Bard College	8	108	104	220		
Graduate and Professional Students						
Graduate Faculties	797	2,741	2,491	6,029		
Law	22	500	468	990		
Medicine	1	472	438	911		
Nursing		172		325		
Engineering	8	285	153 268	561		
Architecture	3	61	58	122		
Journalism		62	57	119		
Business	73	491	481	1,045		
Dental and Oral Surgery	/3	49*	401	1,045		
Dentistry		225	219	444		
Dental Hygiene		_		444 105		
Library Service	387	53 382	52	1,159		
Optometry	30/	109	390 102	211		
Teachers College	8,365					
Now College	0,305	6,175	5,958	20,498		
New College	8	187	118	313		
Pharmacy	3	317	291	611		
University Classes (University Extension)		3,958	3,222	7,180		
Summer Session (Nonmatriculated)	1,914			1,914		
Gross Totals	11,822	19,014	17,517	48,353		
Duplicate Registrations						
Net Total for the Year				32,240		

TABLE III

PROPORTION OF MEN AND WOMEN FOR THE PAST TEN YEARS, EXCLUSIVE OF THE SUMMER SESSION AND UNIVERSITY EXTENSION

Year	Men	Percent	Women	Percent	Total
1929-30 1930-31 1931-32 1932-33 1932-33 1933-34 1934-35 1935-36 1935-37 1937-38 1938-39	8,225 8,361 8,600 8,260 7,735 8,158 8,018 8,215 8,274 8,401	47.99 48.40 49.06 50.58 50.02 49.32 48.50 47.65 47.54 48.05	8,914 8,915 8,928 8,072 7,730 8,382 8,513 9,029 9,132 9,084	52.01 51.60 50.94 49.42 49.98 50.68 51.50 52.35 52.46 51.95	17,139 17,276 17,528 16,332 15,465 16,531 17,244 17,406

TABLE IIIA

PROPORTION OF MEN AND WOMEN IN UNIVERSITY EXTENSION, 1938-39
EXCLUSIVE OF STUDENTS IN SPECIAL COURSES

	Men	Percent	Women	Percent	Total
Resident Extramural	3,070 255	56.85 9.64	2,330 2,389	43.15 90.36	5,400 2,644
Total	3,3 <sup>2</sup> 5	41.34	4,719	58.66	8,044

Matriculated students taking courses in University Extension are not included in the above.

### TABLE IV

## DUPLICATE REGISTRATIONS BETWEEN SUMMER SESSION OF 1938 AND THE ACADEMIC YEAR 1938-39

A. Students of Summer Session Who Returned in Winter or Spring of 1938-39

School or Faculty to Which They Returned	Men	Women	Total
architecture	4		4
Bard College	5		5
Barnard College		60	60
Business	58	II	69
Columbia College	108		108
Dental Hygiene		I	I
Dentistry	I		1
Engineering	26		26
raduate Faculties	265	141	406
aw		I	26
ibrary Service	28	63	91
New College		6	8
Tursing School		3	3
ptometry	I		ī
harmacy	6		6
hysicians and Surgeons	6		6
eachers College	390	1,041	1,431
niversity Classes (University Extension)	54	61	115
niversity Undergraduate	6	4	10
Total	985	1,392	2,377

## B. Matriculated Graduate Students of Summer Session 1938 Who Did or Did Not Return in Winter or Spring Sessions of 1938–39

Faculties	Retu <b>r</b> ned	Did Not Return	Total
Political Science, Philosophy, and Pure Science Teachers College	328 856	469 43544	797 5,400
Total	1,184	5,013	6,197

 $\label{thm:thm:classification} TABLE\ V$  classification of students in the school of engineering

Department	First Year	Second Year	Third Year	Non- Candidate	Graduate	Total
Chemical Engineering. Civil Engineering Electrical Engineering Industrial Engineering. Mechanical Engineering. Metallurgy Mineral Dressing. Mining.	12 18 8 19	26 3 6 3 14 3 	13 1 3 1 5 4	4 38 4 5 1	12 9 30 6 6 6 7	91 28 65 22 49 23 2
Total	109	59	32	28	67	295

Total includes 61 College seniors and 1 University Undergraduate exercising a professional option.

TABLE VI DEGREES AND DIPLOMAS CONFERRED 1938-39

Degree	Men	Women	Total
Degrees Conferred in Course Bachelor of Architecture. Bachelor of Arts (Columbia College) Bachelor of Arts (Barnard College) Bachelor of Arts (Bard College) Bachelor of Science (Business) Bachelor of Science (Engineering) Bachelor of Science (Engineering) Bachelor of Science (Library Service) Bachelor of Science (Coptometry) Bachelor of Science (Pharmacy) Bachelor of Science (Pharmacy) Bachelor of Science (Teachers College) Bachelor of Science (Teachers College) Chemical Engineer Civil Engineer Electrical Engineer Electrical Engineer Engineer of Mines. Mechanical Engineer Metallurgical Engineer Doctor of Dental Surgery Doctor of Education Doctor of Medicine Doctor of Medicine Doctor of Pharmacy Doctor of Philosophy Master of Arts (Political Science, Philosophy, and Pure Science) Master of Arts (Teachers College) Master of Arts (Theology) Master of Science (Business) Master of Science (Business) Master of Science (Engineering) Master of Science (Engineering) Master of Science (Engineering)	Men  3 3 351 34 107 80 45 40 57 31 1 2 4 51 2 30 8 8 10 8 8 8 52 34 37	Women  3 216 10 15 143 58 3 416 2 15 17 1 47 214 1,529 6 17 16	6 351 351 34 117 95 45 183 92 60 34 462 57 11 2 4 51 38 89 49 199 516 2,137 14 10 95 11 11 11 11 11 11 11 11 11 11 11 11 11
Master of Science (Library Service)	7 8 5	6 7	23 14 12
Total	2,309 11 2,298	2,742 13 2,729	5,051 24 5,027
Certificates and Diplomas Granted in Course Certificate in Accounting (University Extension) Certificate in Landscape Architecture (University Extension) Professional Diplomas (Teachers College) Certificate in Dental Hygiene Certificate of Proficiency in Oral Surgery. Certificate of Proficiency in Orthodontics. Certificate in Library Service Certificate in Secretarial Studies (Business). Certificate in Secretarial Studies (University Extension)	2 2 2 22  3 7 3 1	33 5 <sup>2</sup>  6 9	2 2 55 52 3 7 9 10
Total	40	114	154
Total Degrees and Diplomas Granted in Course  Deduct duplicates <sup>a</sup> and <sup>b</sup>	2,349 19	2,856 37	5,205 56
Total Individuals Receiving Degrees and Diplomas in Course	2,330	2,819	5,149

## TABLE VI-(Continued)

Degree	Men	Women	Total
Honorary Degrees Doctor of Laws. Doctor of Letters Doctor of Sacred Theology. Doctor of Science.	. 4	I	6 4 2 2
Total	13	I	14

ADDENDA Degrees Awarded in 1938-39 as of Dates Prior Thereto

Degree	Men	Women	Total
Bachelor of Arts (Columbia College). Bachelor of Arts (Barnard College). Bachelor of Science (Engineering). Bachelor of Science (New College). Bachelor of Science (Pharmacy). Bachelor of Science (Teachers College). Bachelor of Science (University Course). Master of Arts (Political Science, Philosophy, and Pure Science) Master of Arts (Teachers College).	 I  2  3	 I  5  I 	8 1 5 2 1 3 1
Total	16	9	25

<sup>©</sup> Distributed as follows: B.S. (Engineering) and M.S. (Engineering), 1 man; B.S. (Library Service) and M.S. (Library Service), 1 woman; B.S. (New College) and A.M. (Teachers College), 6 men and 12 women, 18 total; B.S. (Teachers College) and A.M. (Teachers College), 2 men, A.B. (Columbia College) and A.M. (Teachers College), 2 men, A.B. (Columbia College), 8 in addition to those noted in footnote a (11 men and 13 women, 24 total), the following duplications occur: B.S. (Teachers College) and Teachers College diploma, 2 women; A.M. (Teachers College) and Teachers College diploma, 7 men and 21 women, 28 total; Ed.D. and Teachers College diploma, 1 man and 1 woman, 2 total.

TABLE VII

RESIDENCE OF STUDENTS (EXCLUDING STUDENTS IN EXTRAMURAL AND SPECIAL COURSES IN University extension) 1938-39

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Barnard College	857 34 15 15 692 692 17		9 - 64 : 44 :
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Graduate Faculties	2,683 15 15 2,298 2,156 10	1921	26 12 20 6 6 6 11
Dental Hygiene	57 17 10 10 10 10 10 10 10 10 10 10 10 10 10	7:7	7
Dentistry	225	173	φ
Business	787 1 23 1 8 8 8 8 8 1 0 1 0 1 0	297	1 2 1 5
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Engineering	26,	191	ν н н н
Medicine	200 27 275 16 16 16	179	5
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Residence	United States  North Alloutic Division (§3.69 percent)* Connecticut. Maine. Massichusetts. New Hampshire. New Jersey. New Jersey. Rew Tork. Rhode Island. Vermont.	New York City (44.18 percent)a	South Atlantic Division (3.08 percent) <sup>a</sup> Delaware District of Columbia Florida Georgia Maryland North Carolina South Carolina

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TABLE VII-(Continued)

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University Extension Resident	S	5,160	· (5) H	: = "	4	17.00 CH
[v10]L	55 2 2 25	92	на	9 1 1	4 -	999
znis ru V	: :::	191	:::			: : : : - : :
Bard College	: :::	108	:::	::::		
<sub>Р</sub> училуч <sub>А</sub>	: :::	327	: : :	: : :	: : : -	
Teachers College and New College	23	7,965		4 : :	3	70
Barnard College	A 11 . W	937	: : :			-
VrismoigO			: : :			
Library Service	7 : 1 0	4.19				
VireresinU estanbargrahaU			: : :			
Graduate Faculties	70	3,067	: 1	ci		30
Dental Hygiene	: : : :	52	: : :			
Vrisiinsa	` !!!	230				
ssəuisud	2 : 1 :	1			- : : -	
msilon ruot		59	:-:			
Architecture		59	:::			
Engineering		285				
9ni2ib9M	. : : : : : :	3.	- : :			
wnJ	: :::	504				
Columbia College	9 1 8	1,720	: : :		- : : :	
Residence	Insular and Noncontiguous Territories (0.30 percent)a Alaska Canal Zone Hawaiian Islands	Puerto Rico	Foreign Countries Alghanistan. Argentina. Armenia.	Australia Austria. Bermuda	Brazil British West Africa British West Indies Bulgaria.	Burma Ganada Chile Chine Colombia Costa Rica

TABLE VII-(Continued)

9891 noissed remmud	84 4	327	11,950		5,400 11,950
University Extension Resident	7 7 7 9 1 1 2 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 1 2 1 1 1 2 1	2.40	5,400		
[n10]T	41 41 1 9 6 1 0 4 8 8	+31	219,71	127	17,485
ZuisruV.		S		:	:
Bard College	7	ω,	331 111 172	:	:
Рһлгтасу	: : : : = : : : : : : : : : : : : : : :	*	331	:	
Teachers College and New College		213	8,178	:	
Barnard College		15	952	:	:
клэто140		:	109	:	
Library Service		6	+58		
University Undergraduates		,	12.4	:	:
Graduate Faculties		111	3,178		
Dental Hygiene		,	53	:	:
Dentistry		2	235	:	:
Business		27	568	:	:
meilannot		c	62	:	
Architecture	H	2	1.9	:	:
Enireering	::	10	295	:	:
Medicine		,	483		:
av7	: : : : : : : : : : : : : : : : : : :	CI	506		i
Columbia College		13	1,733	i	:
Residence	Rumania Siam Siam South Africa South Africa Spain Straits Settlement Sweden Switzerland Syria. Unkey U. S. S. R Venezuela. Yugoslavia.	Total Foreign Countries	Grand Total	Ouplicates	Grand Total (Net)

a Exclusive of University Extension and Summer Session.

4 Transfers at midyear within the University.

TABLE VIIA

PERCENTAGE OF STUDENTS FROM THE SEVERAL GEOGRAPHICAL DIVISIONS DURING THE PAST TEN YEARS, EXCLUSIVE OF UNIVERSITY EXTENSION AND OF SUMMER SESSION

Division	08-6261	1630-31	1931-32	1932-33	1933-3:4	1934-35	1935-36	1936-37	1937-38	1938-39
North Atlantic Division. South Atlantic Division. South Central Division. North Central Division. Western Division. Insular Territories. Foreign Countries. New York City.	77.13 47.23 9.06 2.74 0.31 3.41 42.97 57.03	78.72 3.97 8.29 8.29 2.47 0.33 4.3.45 56.55	80.85 3.82 3.82 7.69 2.13 0.27 2.83 43.66 56.34	83.76 3.34 1.88 6.68 1.84 0.21 2.29 45.96 54.04	86.82 2.71 1.80 1.53 0.26 1.93 48.08 51.92	85.27 2.86 2.04 5.69 1.84 0.28 2.02 47.14 52.86	84.80 2.85 2.08 5.88 2.12 0.25 46.41 53.59	83.95 3.23 2.02 6.25 2.25 0.27 2.03 44.97 55.03	83.35 3.14 2.16 6.49 2.39 0.22 44.85 55.15	83.69 3.08 3.08 2.04 6.17 2.27 2.27 2.45 44.18 55.82

### TABLE VIII

AGGREGATE ATTENDANCE IN ALL COURSES, 1938-39 (EXCLUSIVE OF COURSES IN THE SCHOOL OF MEDICINE, SCHOOL OF DENTAL AND ORAL SURGERY, SUMMER SESSION, UNIVERSITY EXTENSION, TEACHERS COLLEGE, BARNARD COLLEGE, COLLEGE OF PHARMACY, AND BARD COLLEGE)

Department	Number of Half-Year Courses	Number of Registrations
Agriculture	8 24	29 267
Architecture. Drawing and painting. Sculpture. Astronomy. Botany	43 8 2 7 35	339 74 25 73 298
Business Accounting Advertising Banking. Economics. Finance. Foreign trade. Geography. Industrial relations Insurance. Law. Marketing. Statistics. Stenography and typewriting. Transportation. Chemical Engineering. Chemistry. Chinese. Civil Engineering. Contemporary Civilization Drafting.	27 6 14 14 11 2 97 6 3 15 2 3 7 31 7 31 14 45 8	1,048 170 519 320 423 15 120 84 90 106 468 63 45 98 556 2,165 61 333 1,941 264
East European Languages Polish Russian Slavonic Economics Electrical Engineering	4 7 6 69 40	13 25 25 2,048 444
English and Comparative Literature Comparative literature English	15 83	580 4,236
Fine Arts and Archaeology Archaeology. Fine arts. Geography.	36 2	3 393 256
Geology and Mineralogy GeologyMineralogy	48 8	505 72
Germanic Languages Dutch German Gothic Scandinavian	2 47 I 2	654 3 7
Greek and Latin Classical civilization. Classical literature. Classical philology. Greek. History of political thought. Latin.	7 2 2 12 2 21	141 16 8 44 14

## TABLE VIII—(Continued)

Department	Number of Half-Year Courses	Number of Registrations
History Colloquium History History of Science Humanities Indo-Iranian and Comparative Linguistics	4 103 2 4	88 2,431 12 1,360
Comparative linguistics. Indo-Iranian. Industrial Engineering. Japanese. Journalism Law. Library Service	6 16 6 13 93	19 18 99 22 696 4,141
Book arts Library service Mathematics. Mechanical Engineering. Mining and Metallurgy	5 47 32 37	191 1,898 1,320 554
Metallurgy Mineral dressing Mining. Music Philosophy. Physical Education	20 7 15 30 45	177 24 57 817 723
HygienePhysical education	4 4	584 2,032
Physics Mechanics, Optometry. Physics. Psychology	5 19 58 35	212 980 1,593 1,015
Public Law and Government Government. Public law Religion. Romance Languages	21 32 4	816 502 98
Celtic. French. Italian. Romance philology. Spanish. Science.	3 70 13 14 21 4	1,548 159 174 197 379
Semitic Languages Akkadian Arabic Hebrew Semitic Syriac	2 6 3 4 2	2 17 7 13 2
Social Science Social legislation. Sociology. Statistics. Theoretical Engineering Chemistry. Zoölogy.	5 30 16 4 28	68 826 555 168 634
Miscellaneous Course Engineering	2	253
Total	1,755	47,108

## TABLE IX

## STUDENTS IN UNIVERSITY EXTENSION CLASSIFIED ACCORDING TO PRIMARY REGISTRATION

Primary Registration	University Classes	Extra- mural	Special	Total
Architecture	29			20
Barnard College	44			44
Business	378			378
Columbia College	612			612
Dental and Oral Surgery	2			2
ingineering	l 81 l			81
Graduate Faculties	746			746
ournalism	34		l	34
.aw	5			
ibrary Service	83			8
Medicine	Ĭ			· ·
Optometry	47			4
Pharmacy	l í l			
Seachers College (including New College)	478			47
Iniversity Undergraduate	109			10
Jniversity Extension	5,400	2,644	758	8,80
Total	8,050	2,644	758	11,45

TABLE X

aggregate attendance in courses in university extension, resident and extramural, 1938-39

	Number of Cour		Numb Registr	
Courses	Resident	Extra- mural	Resident	Extra- mural
Advertising art	5		37	
Anthropology	23		37 182	
Architecture	31		323	
Armenian	2		5	
Astronomy	4		18	
Biology		2		67
Book arts	4		77	
Botany	2		37	
Business				
Accounting	34		1,043	
Advertising	17		642	
Agriculture	3 7		23	
Banking	7		124	
Bookkeeping	2	• • •	69	
English (business)	8		213	
Finance.	6	2	120	130
Industrial relations		• • •	179	
Insurance	4	• • •	50	
Law	-5	• • •	208	
Marketing	10 6		206	
Office procedure			87	
Real estate	7	• • •	214	
Salesmanship	4 2		121	
Secretarial correspondence	21	• • •	281	
Stenography	21 2	• • •	201	
Stenotypy	2 2	• • •		
Transportation	- 1	• • •	75	
Typewriting. Typography.	15		197	
	2	• • •	50	
Celtic	2	• • •	9 71	
Chemistry	21	• • •	428	
Chinese.	2		420	
Civil engineering.	2		10	
Clothing.	ĩ	• • •	l i	
Comparative literature.	8		174	
Drafting	19		155	
Dramatic arts	20		300	
Drawing	6		78	
Drawing and painting	7		36	
Economics	15		516	
Education		68		1,554
Electrical engineering.	7		43	,,,,
English	78	8	2,113	102
Fine arts.	íı	2	99	51
Finnish	2		3	,
French	22		600	
General science	I		12	
Geography	10		121	
Geology	5 16		53 382	
German				
Government	10	I	154	5
Greek	3 16		34	
History	16		456	
Hungarian	2		. 5	

## TABLE X—(Continued)

	Number of Half-Year Courses		Number of Registrations	
Courses	Resident	Extra- mural	Resident	Extra- mural
Hygiene		I		26
Industrial engineering	7		56	
Italian	14		163	
Landscape architecture	22		183	
Latin	11		60	
_aw	4	•••	67	
Library service	8	• • •	208	
Lithuanian			10	
Mathematics	4	• • •		
	24	• • •	414	
Mechanical engineering	1		13	
Medical records	2	• • •	10	
Medical terminology	2		32	
Mineralogy	3	• • •	35	
Modern Greek		• • •	14	
Motion pictures	2	• • •	26	
Music	36		336	
Vursing		14		406
ainting	6		37	
Philosophy	10		211	
Physical education	1		44	
Physical training	3		17	
Physics	3		211	
Physiology	3		119	
Polish	4	12	36	140
Psychology	36	2	1,017	13
Public health nursing	3.	4		66
Public law	I		81	
Religion	2		19	
Rumanian	ī		1	
Russian	9		43	
culpture			64	
ocial case work	4		04	25
				35
ociology	-		174	
panish	25		420	
peech	14	4	549	49
Statistics	7		133	
Swedish	2		9	
Teachers College fine arts	13	• • • •	3 <del>4</del> 6	
Teachers College hygiene	5			
Teachers College music	4	• • • •	13	
Cextiles	12		170	
Jkrainian	I		3 98	
Zoölogy	5		98	
Total	848	121	15,624	2,644

TABLE XI

## STUDENTS IN SPECIAL COURSES IN UNIVERSITY EXTENSION NOT INCLUDED IN OTHER TABLES

Courses	Winter Session Only	Spring Session Only	Both Sessions	Total
Chemical engineering. Dentistry French. Guidance Study English. Law. Medicine. Recreation (Barnard).	32 16	28 20 6 10  177 10	 6  64 44 14	40 52 28 10 11 485 77 55
Total	375	255	128	758

## TABLE XII

## SUMMER SESSION 1939

():'	M	III.	m	Perce	entag <b>e</b>
Classification	Men	Women	Total	Men	Women
A. Total Enrollment	3,608	8,342	11,950	30.19	69.81
B. Students Classified as Old and New Previously registered (62.95 percent) New (37.05 percent)	2,195 1,413	5,328 3,014	7,523 4,427	29.18 31.92	70.82 68.08
Total	3,608	8,342	11,950		
C. Students Classified According to Faculties  I. Nonmatriculated (16.08 percent).  II. Matriculated (83.92 percent).  Columbia College.  University Undergraduates.  Bard College.  Business B.S.  Business B.S.  Business M.S.  Business unclassified.  Pharmacy.  Architecture B.Arch.  Engineering B.S.  Engineering M.E.  Engineering M.S.  Library Service B.S.  Library Service M.S.  Library Service durclassified.  Optometry B.S.  Physicians and Surgeons M.D.  Dentistry.  Graduate Faculties	975 2,633 141 9 3 3 19 30 3 14 2 13 1 1 4 52 1 15 9	946 7,396  5  3 7 1  194 68 14 78	1,921 10,029 141 14 3 3 37 4 17 3 13 1 1 246 83 14 87 11 8	50.75 26.25	49.25 73.75
A.M. Political Science. Philosophy. Pure Science. Union Theological Seminary. Ph.D. Political Science. Philosophy. Pure Science Education Business. Teachers College B.S. A.M. Ed.D. Unclassified.	89 97 31 3 48 65 72 141 13 1,226 1,37 331	62 168 12 1 18 72 13 114  915 3,794 86 1,704	151 265 43 4 66 137 85 255 13 970 5,020 223 2,035		
Total I and II	3,608	8,342	11,950		

## TABLE XII—(Continued)

Classification	Men	Women	Total
D. STUDENTS CLASSIFIED ACCORDING TO TEACHING POSITION I. Not engaged in teaching (25,82 percent)	1,428	1,658	3,086
II. Engaged in teaching (74.18 percent)	2,180	6,684	8,864
Elementary schools. Secondary schools. Higher educational institutions. Normal schools. Principals Assistant principals. Supervisors. State supervisors. Superintendents. Assistant superintendents. Special teachers Private school teachers. Librarians Industrial schools. Technical schools. Vocational schools. Private teachers. Business schools. Institutes. Deans of women. Assistant deans of women. College deans. Nursery schools Registrars Assistant registrars. Directors of admissions. Directors of admissions. Directors of religious education. Vocational guides Presidents. Bursar.  Total I and II.  E. Students Classified According to Residence See Table VII	268 1,032 312 31 178 13 30 163 75 80 755 1 8 66 20 4 1 3,608	2,521 2,431 424 77 130 19 211 11 2 150 147 329  5 18 87 4 1 15 24 4  42 9 4 1 5 11 11 15 15 15 15 15 15 15 15 15 15	2,789 3,463 746 1088 308 32 241 74 9 182 227 404 13 24,87 5 1 1 3 3 5 2 4 4 4 4 2 9 9 1 1 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1

## TABLE XII—(Continued)

Subjects	Number of Courses	Number of Registrations
F. Aggregate Attendance in Courses Accounting. Advertising. Anatomy. Anthropology. Astronomy. Bacteriology Banking. Biochemistry. Biology. Book arts. Botany. Business English. Cancer research. Chemical engineering. Chemistry. Teachers College chemistry. Christian ethics. Church and community. Church history. Classical literature. Clothing. Comparative literature. Cookery. Demonstration school. Doctoral candidate. Drafting. Dramatic arts. Drawing and painting. Economics. Education. English. Teachers College English Family economics. Finance. Fine arts.	931 2 2 1 2 5 8 2 6 1 1 3 1 2 3 2 3 1 7 2 7 1 1 6 2 3 3 9 6 4 2 5 3 2 7	148 70 13 24 39 13 49 37 178 81 35 13 26 45 21 13 44 286 43 324 107 38 49 33 24 295 16,067 1,163 329 127 62 103
Teachers College fine arts. French. Geography. Teachers College geography. Geology. German. Government. Greek. Health education History. Teachers College history. Home management. Household arts. Household chemistry. Household engineering. Hygiene. Industrial arts. Institutional management. Italian. Latin. Law Library service. Marketing. Mathematics.	21 23 9 4 3 13 2 2 2 1 23 7 1 2 2 2 7 3 9 4 7 1 2 2 2 1 2 2 1 3 9 4 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	885 254 68 150 33 131 49 13 512 206 51 97 18 19 350 29 204 42 71 27 1,193 31 260

TABLE XII—(Continued)

Subjects	Number of Courses	Number of Registration
Music	12	97
Teachers College music	69	707
New Testament	5	107
Nursing	10	183
Nutrition	2	41
Office appliances.	2	9
Old Testament.	I	19 66
Philosophy	2	66
Philosophy of religion	4	86
Physical education	46	786
Physics	19 6	161
Physiology	6	77
Practical theology	2	31
Psychology	16	241
Public law	3	40
Recreation	2	19
Religion	I	20
Religious education	13	250
Romance philology	Ī	10
Russian	3	6
Science	2	50
Sculpture	I	39
Service	4	118
Social science	I	131
Social work	I	14
Sociology	7	134
Spanish	6	94
Speech	I	94 38
Teachers College speech	7	440
Statistics	2	19
Stenography	3	40
Stenotypy	Ī	2
Textiles	2	75
Typewriting	3	59
	<del></del>	<del></del>
Total	1,058	29,115

In addition to the foregoing tables which are published annually, the statistical material listed below is maintained by the office of the Registrar and will be supplied on request to those interested:

Major interest of students registered for higher degrees, exclusive of the Summer Session.

Major interest of recipients of higher degrees 1938–39, exclusive of the Master's degree in Teachers College and Union Theological Seminary, and the Doctor's degree in pharmacy.

## REPRESENTATIVES OF THE UNIVERSITY

## 1938-39

## AT THE INSTALLATIONS

Of James Albert Keller as President of Florence State Teachers College, Florence, Ala. (October 1, 1938): L. W. Crawford, Ph.D.

Of Charles Burgess Ketcham as President of Mount Union College, Alliance, Ohio (October 20, 1938): Frank E. Joseph, LL.B.

Of the Reverend Edward B. Bunn as President of Loyola College, Evergreen, Baltimore, Md. (October 20, 1938): B. Franklin Hearn, Jr., A.B.

Of Karl Clayton Leebrick as President of Kent State University, Kent, Ohio (October 21, 1938): T. F. GITHENS, A.M.

Of Thomas William Bibb as President of Missouri Valley College, Marshall, Mo. (October 25, 1938): Byron Spencer, LL.B.

Of William Harold Cowley as President of Hamilton College, Clinton, N. Y. (October 29, 1938): Professor Philip Caryl Jessup.

Of Edwin Sharp Burdell as Director of The Cooper Union, New York, N. Y. (November 3, 1938): President Nicholas Murray Butler, Deans George Braxton Pegram, Joseph Warren Barker.

Of Leonard Carmichael as President of Tufts College, Medford, Mass. (November 4, 1938): Philip Meserve Hayden.

Of Marion Lofton Smith as President of Millsaps College, Jackson, Miss. (November 8, 1938): George McQueen Street, M.D.

Of Hugh J. Rhyne as President of Marion College, Marion, Va. (November 29, 1938): ROBERT WILLIAMS, A.M.

Of the Reverend John A. Elbert as President of the University of Dayton, Dayton, Ohio (December 3, 1938): John C. Walter, E.E.

Of Robert Lee McLeod, Jr., as President of Centre College, Danville, Ky. (January 20, 1939): Nicholas McDowell McKnight, Paul Bailey Boyd, A.M.

Of Joseph Henry Edge as President of Dakota Wesleyan University, Mitchell, S. Dak. (January 31, 1939): Very Rev. Edwin Blanchard Woodruff, D.D.

Of Evald Benjamin Lawson as President of Upsala College, East Orange, N. J. (February 6, 1939): John H. Wuorinen, Ph.D.

Of John Owen Gross as President of Simpson College, Indianola, Iowa (April 22, 1939): John Latenser, Jr., B.Arch.

Of Hugh Meglone Milton, II, as President of the New Mexico College of Agriculture and Mechanic Arts, State College, N. Mex. (May 23, 1939): Henry J. Ponsford, B.Arch.

Of Benjamin F. Schwartz as Chancellor of the Nebraska Wesleyan University, Lincoln, Nebr. (May 31, 1939): Kenneth Dryden, LL.B.

### AT THE ANNIVERSARY CELEBRATIONS

Of the Fiftieth Anniversary of the Founding of the Georgia School of Technology, Atlanta, Ga. (October 7-8, 1938): Dean Joseph Warren Barker.

Of the Seventy-fifth Anniversary of the Granting of the Charter to the University of Denver by the Territorial Legislature of Colorado, Denver, Colo. (March 3–5, 1939): JOHN T. ROBERTS, E.M.

Of the Centennial of Duke University, Durham, N. C. (April 21–23, 1939):

Dean George Braxton Pegram.

Of the Six Hundredth Anniversary of the Université de Grenoble, Grenoble, France (May 13–15, 1939): Professor Horatio Smith.

Of the Eight Hundredth Anniversary of the Foundation of Portuguese Independence Portugal (May 24, 2002). Hyppyrg Courses Program Progr

pendence, Portugal (May 14, 1939): Herbert Claiborne Pell.

- Of the Fiftieth Anniversary of the Founding of the St. Clement Okhridsky University of Sofia, Sofia, Bulgaria (May 21–25, 1939): Dean WILLIAM F. RUSSELL, Professor CLARENCE A. MANNING.
- Of the Centennial of Loras College, Dubuque, Iowa (May 28–29, 1939): SETH JUSTIN TEMPLE, Ph.B.
- Of the Sesquicentennial of Georgetown University, Washington, D. C. (May 28-June 3, 1939): Professor Herbert Wallace Schneider.
- Of the One Hundredth Anniversary of the Evangelical Lutheran Concordia Seminary, St. Louis, Mo. (June 2–3, 1939): Frank Y. Gladney, LL.B.
- Of the Seventy-fifth Anniversary of Gallaudet College, Washington, D. C. (June 3, 1939): Edwin Newell Lewis, Litt.B.
- Of the Fiftieth Anniversary of the Founding of the University of New Mexico, Albuquerque, N. Mex. (June 4-5, 1939): James Frederick Warden, LL.B.
- Of the Seventy-fifth Anniversary and Commencement Exercises of Bates College, Lewiston, Maine (June 15–19, 1939): Dean HERBERT EDWIN HAWKES.

#### MISCELLANEOUS

At the Primer Congreso Internacional de la Enseñanze de la Literatura Iberoamericana, Mexico (August 15–22, 1938): Albert R. Sutter.

At the International Congress of Orientalists, Brussels, Belgium (September 5–10, 1938): Professor Arthur Jeffery.

At the Dedication of the New Campus and Building of the University of Omaha, Omaha, Nebr. (October 6–8, 1938): JOHN LATENSER, JR., B.Arch.

At the Meeting of the Association of American Universities, Berkeley, Calif. (November 10–12, 1938): Dean George Braxton Pegram, Frank Hamilton Bowles.

At the International Celebration in Commemoration of the Discovery of Radium, Electrons, X-Rays, and Hertzian Waves, Paris, France (November 23–30, 1938): Dr. Francis Carter Wood.

At the Meeting of the Middle States Association of Colleges and Secondary Schools, Atlantic City, N. J. (November 25–26, 1938): Dean HERBERT E.

HAWKES.

At the Annual Meeting of the State Association of Colleges and Universities, Syracuse, N. Y. (January 27, 1939): Frank Hamilton Bowles.

At the Dedication of the McDonald Observatory of the University of Texas, Fort Davis, Texas (May 5, 1939): Professor Jan Schilt.

At the Centenary of the Birth of Théodule Ribot, Paris, France (June, 1939): Andrée Courthial, Ph.D.

At the Meeting of the Society for Promotion of Engineering Education, State College, Pa. (June 19–23, 1939): Dean Joseph Warren Barker.



## Columbia University in the City of New York

# Report of the Treasurer June 30, 1939

New York
1939



### REPORT

To the Trustees of Columbia University in the City of New York

The Treasurer makes the following report of the financial affairs of the Corporation for the year ended June 30, 1939.

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## INCOME AND EXPENSE STATEMENT (GENERAL FUNDS) FOR THE YEAR ENDED JUNE 30, 1939

### INCOME

INCOME		
From Students:		
Fees (see page 9)	\$3,101,957.68	
Residence Halls (see page 46)	64,840.31	
Dining Halls (see page 46)	5,417.29	
		00 100 100 10
Other Income	19,906.85	\$3,192,122.13
-		
From Endowments:		
Rents (Net) (see page 8)	3,221,944.09	
Income of Special Endowments (see page 8)	1,631,376.05	4,853,320.14
_		
From Other Properties—Rents—(Net)		13,205.91
From Investments, etc. (see page 8)		30,271.72
From Gifts and Receipts for Designated Purposes		687,662.10
From Allied Corporations (see page 9)		1,942,609.68
From School of Dental and Oral Surgery Clinics		109,063.92
From Athletics (see page 46)		71,509.88
From Civil Engineering Testing Laboratory and Fire		
Testing Station		11,572.37
From Department of Buildings and Grounds (see page 9)		54,782.33
From Miscellaneous Sources		10,083.85
	-	
Total Income		\$10,976,204.03
20002 200000000000000000000000000000000		<b>,</b> ,
EXPENSES		
Educational Administration and Instruction. \$8,900,814.38		
Athletics (see pages 20, 46)		
	\$8,989,957.50	
	φο,σοσ,συ1.υυ	
Buildings and Grounds-Maintenance (see		
page 36)	911,859.98	
Library (see page 40)	500,676.77	
Business Administration of the Corporation:		
Salaries, Office Expenses, etc. (see page 41) 228,325.01		
Insurance on Academic Buildings (Fire and		
Liability) (see page 41)		
	271,576.07	
A	72,102.99	
Annuities (see page 42)	12,102.33	
Special Appropriations—Schedule J (see		
page 42)	117,434.31	
Interest on Corporate Debt, etc. (see page 43)	170,648.72	
-		
Total Expenses		11,034,256.34
	-	
Balance, being excess of Expenses for Main-		
tenance over Income before providing for		
Amortization of Loan of 1936		\$58,052.31
Add:		
Amount Provided for Amortization of		
Loan of 1936		305,000.00
Loan of 1936,		303,000.00
Deficit being aware of European for Main		
Deficit, being excess of Expenses for Main-		
tenance over Income and after providing		*0.00 050 05
for Amortization of Loan of 1936		\$363,052.31
	:	

INCOME OF THE CORPORATION—YEAR ENDED JUNE 30, 1939

	From Students	ints	From Other Sources	Total
	Fees	Other Income		
From Students:  Morningside Heights: University Fees. Graduation Fees Entrance, Late and Deficiency Examination Fees. Tuition Fees.	\$114,573.04 57,904.33 11,845.50 1,529,900.10 81,714,223.0	81.714.223.03		81,714,223.03
Summer Session: University Fees Tuition Fees Less Teachers College and Union Theological Seminary Proportions.	82,758.12			
Privileges of Late Registration	636.00 317.851.70	\$378.10		317,851.70
Exeurisions University Fees Unition Fees Tuition Fees To a feet Fees	40,885.00 558,701.66 258.00 95,999.54			
Institute of Arts and Sciences.  American Institute of Banking.  Degree, Examination and Late Fees.	66,349.60 190.00 692,383.80	0		692,383.80
Medical School: University Fees	9,075.00			

Tuition Fees. Graduation Fees. Athletic and Recreational Fees. Late and Deficiency Examination Fees.	207,601.22 2,181.00 4,110.00 42.00			66 000 666
School of Nursing: University Fees Tuition Fees. Late Fees.	3,250.00 3,250.00 17,935.00 5.00			
School of Dental and Oral Surgery: University Fees. Tuition Fees. Deficiency and Late Examination. Graduation Fees.	3,960.00 98,676.26 57.00 1,020.00			ORT OF
Oral Hygiene: University Fees Tultion Fees Graduation Fees Deficiency and Late Examination	1,050.00 19,950.00 521.00 39.00			THET
Advanced Courses: University Fees. Tuition Fees. Graduation Fees.	500.00 7,426.67 100.00 133,299.93			REASUR
Miscellaneous		18,298.27		E 23862481
Material Furnished Students		1,230.48	:	1,230.48
Residence Halls		64,840.31		64,840.31 5,417.29

		From Students	lents	From Oth	From Other Courses	F
	₩.	Fees	Other Income			
From Endowment: Rents: Upper Estate (Net)				\$3.194,601.07	94,601.07	
From Income of Special Endowments:  For Specific Purposes				1,080,043.82	\$3,221,944.09  \$3,221,944.09	\$3,221,944.09
From Other PropertiesRent, etc(Net)					1,631,376.05 13,205.91	1,631,376.05 13,205.91
From Investments, etc.: Interest: On General Investments. On Safekeeping of Students Funds. On 503-11 Broadway. On Gifts and Receipts for Designated Purposes. On Notes Receivable.				275.91 1,609.31 13,257.64 13,046.20 2,082.66	30,271.72	30,271.72
From Gifts and Receipts for Designated Purposes					687,662.10	687,662.10
From Payments by Allied Corporations:  For Salaries and Annuities:  Barnard College.  Carnegie Foundation.  Presbyterian Hospital.  Teachers College.				457,043.48 149,237.36 257,209.95 894,648.91	487,043.48 149,237.36 257,209.95 894,648.91	

	R		окт	OF THE TREASURER
1.942.609.68	109,063.92	71,509.88	11,572.37	54,782.33 54,782.33 10,083.85 10,083.85 \$7,784,081.90 10,976,204.03
42,604.40 58,503.34 60,017.50 23,344.74 1.92,609.68	109,063.92	71,509.88	11,572.37	
			:	
				\$90.164.45
				\$3,101,957.68
Bard College.  New York Post-Graduate Medical School and Hospital  Babies Hospital  Neurological Institute.	School of Dental and Oral Surgery: Teaching and Service Clinics ((including infirmary)	Athletics.	Civil Engineering: Receipts from Testing Laboratory	Department of Buildings and Grounds: Barnard College for Heat, Light and Power Income from Tennis Courts. Post Office Government Allowance. Telephone Charges. Heating University Houses. From Miscellaneous Sources: Various.

# EXPENSES—EDUCATIONAL ADMINISTRATION AND INSTRUCTION

	Expenditures	Depart- mental Totals	From General Income	From Grifts Income and Receipt of Special for Endowments Designated	From Gifts and Receipts for Designated Purposes
GENERAL UNIVERSITY ADMINISTRATION:	64 F000		00 203 6369	00 016	689 500 00
Salaries	11,555.01		11,555.01	00.010,±¢	:
Deans' Appropriations.	2,708.38		2,708.38		
Alumni Records	3,150.00		3,150.00		
Clerk's Office Sundries	1,350.00		1,350.00		
President's Emergency Fund	8,737.34		8,568.35	168.99	
President's Fund	20,000.00		20,000.00		857.40
Expenditures from Class of 1882 Gift	18 900 83		48 400 63	500 00	
Fublic Ceremonies	14,631.04		14,631.04		
Social Club Kindergarten Class for Faculty Children	1,500.00		1.500.00		
Student Activities, King's Crown	12,023.57		11,940.00	16.23	67.34
University Representation	3,573.98		3,553.98		20.00
Expenditures from A. K. Cross Fund	479 05	:	:	479.05	
Restoration of 1882 Memorial Window	894.86				894 86
University Hospitality	108.75		108.75		
Printing New Edition of By-Laws	250.00	:	250.00		
Grant to Bard College	30,000.00		30,000.00		
Expenditures from Beaumont Trust Gift	6,803.04				6,803.04
Expenditures from Watson Gift	2,479 34		:		2,479.34
Expenditures from Wiggin Fund	1,801.25			1,801.25	
Expenditures from De Lamar Fund	90.15			90.15	
Expenditures from Class of 1927 Fund	53.33	53.33		53.33	

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
PUBLICATION AND RESEARCH Research in Physics. Special Publication Fund. Fund for Research. Study of the Control of Business in Medieval and Tudor England. Works of John Milton. Phenix Fund. Research in History. Research in the Humanities. Columbia University Quarterly. Research in Bio-Physics. Columbia Primate Station. Publishing Journal of American Linguistics Study of Group Adjustment. Study of Young Workers in Metropolitan Area.	\$250.00 30,000.00 21,010.00 3,605.57 192.21 133.35 81,816.83 6,092.76 1,800.00 2,756.22 8,315.74 977.00	\$893 9.635 9.635	\$30,000.00 21,010.00 192.21 4,435.01 1,259.27 1,800.00	\$250.00 23,143.74 2,756.22	\$3,605.57 133.35 77,381.82 4,833.49 8,315.74 8,315.74 977.00 2,596.51
MAISON FRANCAISE Salaries Departmental Appropriation. Institute Francaise.	2,283.62 1,571.97 1,200.00	5,055.59	2,078.62 1,571.97 1,200.00	205.00	
CASA ITALIANA Salaries. Promotion of Italian Studies and Publications.  Departmental Appropriation.	4,320.00 1,047.11 2,160.00	7,527.11	3,975.99	344.01	1,047.11

DEUTSCHES HAUS	_	_	-	-	
Maintenance	:	2,033.23		1,026.24	1,006.99
CASA DE LAS ESPANAS Maintenance.	:	2,957.99	1,500.00	:	1,457.99
DE LAMAR INSTITUTE OF PUBLIC HEALTH Salaries. Departmental Appropriation. Research.	44,304.44 4,210.64 13,765.69		515.64	43,294.44	1,010.00
INSTITUTE OF CANCER RESEARCH. Salaries. Departmental Expenses. Research.	48,671.49 6,576.33 45,009.78	62,280.77		48,671.49 6,576.33 1,260.47	43,749.31
TROPICAL MEDICINE (SCHOOL OF) Salaries Contingent Fund. Research	23,100.00 4,000.00 2,000.00	100,257.60	8,100.00	15,000.00	
INSTITUTE OF PUBLIC ADMINISTRATION Salaries For Research	12,000.00	29,100.00	3,800.00	8,200.00	
INSTITUTE OF INTERNATIONAL AFFAIRS Salaries. Departmental Appropriation	10,858.00	15,000.00			10,858.00 897.69
ANTHROPOLOGY Salaries. Departmental Appropriation. Research.	29,849.98 . 511.43 . 6,948.37 .	37,309.78	20,999.98 511.43 5,998.37	4,100.00	4,750 00

	Expenditures	Depart- mental Totals	From General Income	From From Gifts Income and Receipt of Special Endowments Designated Purposes	From Gifts and Receipts for Designated Purposes
ARCHITECTURE Salaries Departmental Appropriation Maintenance of Nevis, Irvington-on-Hudson, N. Y Dean's Fund Town Planning.	\$49,862.00 3,354.06 9,219.87 460.00 907.19	8	\$42,862.00 3,354.06 9,219.87 450.00	\$4,000.00	\$3,000.00
ASTRONOMY Salaries. Departmental Appropriation Research Renal of Tabulating Machines. Card Catalogue	14.332.00 466.83 502.46 551.60 1,200.00		14,332.00 466.83 551.60		502.46
BOTANY Salaries Departmental Appropriation. Gardener Research Supplies.	43,786.67 2,879.71 1,900.00 2,441.81 800.00	51.808.19	26,986.67 2,579.71 1,900.00	300.00	16,800.00
BUSINESS (SCHOOL OF) Salaries. Departmental Appropriation. Research.	182,183.26 3,241.66 1,253.17		141,261.12	40,922.14	1,295.17

REPORT	OF THE TREASURER	15
22,300.00 1,180.00 3,858.53 3,319.92 9,754.02	1,166.70 2,031.65 2,030.00 19,800.00	,438.90
65.55 7,820.00 12,093.85	11,850.92 107.08 1,250.00 500.00	
84,534.45 25,100.00 15,000.00 8,500.00 16,091.00 7,549.69 32,067.78	5,249.08 6,000.00 12,700.00 31.95 500.00 698.446.67	439.87
249,234,79		439.87
106,900.00 25,100.00 15,000.00 17,500.00 16,091.00 19,643.54 32,067.78 3,858.53 3,319,92 9,754.02	17,100.00 1,273.78 6,000.00 2,081.65 13,950.00 113,950.00 1,000.00 118,246.67 690.32 2,850.00	
CHEMISTRY General and Inorganic: Salaries Organic: Salaries Analytical: Salaries Food: Salaries Food: Salaries Assistance Equipment and Supplies Laboratory Costs Research Organic: Research Food: Research	CHINESE AND JAPANESE CHINESE Salaries Departmental Appropriation JAPANESE Salaries Japanese Studies Japanese Studies  EAST EUROPEAN LANGUAGES Salaries Departmental Appropriation. Traveling Expenses.  ECONOMICS Salaries Departmental Appropriation.  ECONOMICS Salaries Departmental Appropriation.	ENGINEERING (SCHOOL OF) ADMINISTRATION Salaries. Supplies and Apparatus.

From Gifts and Receipts for for ents Designated Purposes	60.6	742.58 \$506.72 4,105.89	1,164.89	2,158.24	
From Income of Special Endowments	\$3,749.09	4 :			0.19
From General Income	\$5,500.00	51,700.00 6,842.95 5,907.42	43,289.73 1,288.86	48,246.84	14,100.00
Depart- mental Totals	\$11,303.15	82.805.56			: : <u> </u>
Expenditures	\$3,749.09	56,200.00 6,842.95 7,156.72 4,105.89 8,500.00	43,289.73 1,288.86 668.87 1,164.89 12,295.35	50,405.08 3,996.78 145.89	14,100.00
	For Research Camp Columbia.	ENGINEERING (CHEMICAL) Salaries Laboratory Servants Departmental Appropriation Research Alterations	ENGINEERING (CIVIL) Salaries. Departmental Appropriation Research. Equipment Research Laboratories.	ENGINEERING (ELECTRICAL) Salaries. Departmental Appropriation. Laboratory Changes.	ENGINEERING DRAFTING Salaries Departmental Appropriation

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
Traveling Expenses.	\$500.00	870 581 30		\$500.00	
GREEK AND LATIN Salaries Greek: American School at Athens Latin: American School at Rome Equipment Departmental Appropriation.	46,500.00 250.00 250.00 15.85 58.16		\$35,100.00 250.00 250.00	15.85	\$11,400.00
HISTORY Salaries	177,400.00	47,071.01	1.10,150.00	15,450.00	21,800.00
Departmental Appropriation	2,463.65			742.99	1,720.66
INDO-IRANIAN LANGUAGES Salaries		8,500,00	7,885.00	615.00	
JOURNALISM Salaries Salaries Departmental Appropriation. The Independent Journal. Photographic Room. Printing Classroom Work.	51,330.00 5,710.49 2,499.28 1,534.41 776.53	11.850.71	34,828.36 300.00 1,436.78	16,501.64 5,389.67 1,062.50 1,534.41 776.53	20.82
LAW SCHOOL Salaries Departmental Appropriation.	174,491.78	: :	162,441.78 459.49	8,050.00	4,000.00

Legislative Drafting Research Fund	15,341.02	15,341.02		4,714.63	10,626.39
Plus and Minus Examinations	109.36		109.36		
Subvention to Columbia Law Review.	236.95		236.95		
Moot Courts.	596.24		596.24		
Mimeograph Office.	6,400.00		6,400.00		
Research	6,685.60			3.82	6,681.78
Dean's Fund.	458.94		458.94		
Bust of Justice Holmes	34.31				34.31
		204,813.69			
LIBRARY SERVICE (SCHOOL OF)					
Salaries	85,757.91		74,711.74	9,225.00	1,821.17
Departmental Appropriation.	1,965.15		1,965.15		
Publications	1,027.50				1,027.50
		88 750 56			
MATHEMATICS		00,100			
Salaries	69,433.50		52,733.50		16,700.00
ppropriation.	200.39		85.96		114.43
		69,633,89			
MUSIC					
Salaries	43,134.90		19,977.40	12,057.50	11,100.00
Departmental Appropriation	1,951.28	:	1,951.28		
Undergraduate Music	4,631.27		4,208.98		422.29
PHILOSOPHY AND PSYCHOLOGY		49,717.45			
Alkiosofilia					
Salaries	95,476.44		66,367.35	5,432.63	23,676.46
Departmental Appropriation	239.46		189.46		50.00
Work in Religion.	2,600.00			2,600.00	
PSYCHOLOGY					
Salaries	62,350.00		38,475.00	4,125.00	19,750.00
Assistance	2,000.00		2,000.00		
Departmental Appropriation	3,157.11	:	2,977.37		179.74
Research	1,033.94	:			1,033.91
_		166,856.95	_		

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
PHYSICAL EDUCATION Salaries. Departmental Appropriation Care of Swimming Pool Supervision of Swimming Pool at Bard Hall Use of Tennis Courts.	\$76,214.30 3,358.24 1,500.00 700.00 679.25	689 451 79	\$46,148.29 3,303.29 1,500.00 700.00 679.25	\$1,466.01	\$28,600.00
ATHLETICS Cost of Conducting Intercollegiate Athletics		89,143.12	88,085.87	944.25	113.00
PHYSICS Salaries Salaries Departmental Appropriation Research Traveling Expenses.	152,839.78 15,450.25 3,598.19 500.00	172,388.22	145,359.78 15,408.25 500.00		7,480.00 42.00 3,598.19
PUBLIC LAW AND JURISPRUDENCE GOVERNMENT AND POLITICS Salaries. Traveling Expenses.	37,700.00 1,000.00	: :	22,600.00	: :	15,100.00
PUBLIC LAW Salaries. Departmental Appropriation. Research	40,890.50 385.87 878.25	80 854 62	34,654.06 385.87 878.25	6,236,44	
RELIGION Salaries.		18,750.00	9,716.96	8,033.04	1,000.00

3,035.00 44.56 149.16 2,879.50	8,125.00 39,375.00	755.43	14,002.05 9,650.00 975.00 166.66	815.02 30,400.00 428.91 6,570.62	656.00
294.94	120,800.00 336.29	8,500.00 2.12 100.00	46,897.95 389.27 989.72	72,934.98 7,298.10 71.09	197,056.51
3,035.00 339.50 190.16 5,879.50	: : : =		73.070.65	: : : : -	197,712.51
3,035.00 339.50 190.16 1,399.63 5,879.50	168,300.00 336.29 3,000.00	9,255.43 2.12 100.00	70,550.00 389.27 989.72 975.00 166.66	104,150.00 7,298.10 500.00 7,132.23	197,056.51
Chapel Services Chapel Music. Religious Work. Contingent Fund.	ROMANCE LANGUAGES Salaries Salaries Departmental Appropriation Bibliographical Assistance and Materials	SEMITIC LANGUAGES Salaries Departmental Appropriation American School of Oriental Research in Jerusalem	SOCIAL SCIENCE Salaries Departmental Appropriation. Equipment Bulletin of Social Legislation.	ZOOLOGY Salaries Departmental Appropriation Marine Table, Wood's Hole	SUMMER SESSION Administration and Instruction Entertainment

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
UNIVERSITY EXTENSION Administration and Instruction Institute of Arts and Sciences. American Institute of Banking Printing and Postage. Departmental. Traveling Expenses.	\$424,975.11 40,058.02 65,849 60 23,775.00 26,353.59 100.00	\$5881,111.32	\$124,975.11 40,058.02 65,849.60 23,775.00 26,087.79		\$265.80 100.00
NOME STUDY Office Expenses.	-	5,031.18	5,031.18	:	
Medical School  Salaries Salaries Dean's Appropriation Alcohol Care of Animals Departmental Appropriation Student Health Post Graduate Studies	25,440.77 627.60 1,095.34 7,933.48 3,757.27 141.45 7,500.00	25,440.77 627.60 1,095.34 7,933.48 3,757.27 141.45 7,500.00	21,561.84 627.60 1,095.34 1,276.62 3,476.27	\$2,378.93	1,500.00 5,539.86 92.00 34.97 7,500.00
ANALOM I Salaries. Departmental Appropriation. Research	87,830.77 9,345.32 24,652.56	121,828.65	87,830.77 9,345.32		24,652.56

BACTERIOLOGY Salaries. Departmental Appropriation. Research.	65,246.64 11,588.68 14,541.07	0100000	56,140.00 11,438.68	1,440.00	7,666.64 150.00 14,511.07	
BIOLOGICAL CHEMISTRY Salaries. Departmental appropriation Research.	75,733.31 7,187.56 53,667.75	91,670,639	59,104.33 7,187.56	2,828.98	13,800.00	10 11 1
DERMATOLOGY Salaries. Departmental Appropriation. Research	24,955.00 2,200.00 4,512.67	130,088.02	24,955.00		4,512.67	O IV I O I
DISEASES OF CHILDREN Salaries. Departmental Appropriation. Normal Child Development Study.	84,532.45 8,728.20 35,713.67 4,175.20		27,865.28	1,100.00	55,567,17 6,242.00 35,713.67 4,175.20	1 11 13 1
NEUROLOGY Salaries Departmental Appropriation. Research	50,670.00 6,629.65  25,988.88	100,1149,02	26,370.00 3,729.18	2,185.52	$24,300.00\\2,900.47\\23,803.36$	ICII A D U
NURSING Salaries Salaries Physical Examinations General Duty Nursing Clerical and Laboratory Supplies.	54,186.83 805.00 9,021.76 5,135.68 392.80	69,542.07	805.00 8.800.41 392.80		54.186.83 221.35 5,135.68	C 13 10

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
OBSTETRICS AND GYNECOLOGY Salaries Departmental Appropriation. Pathologist and Pathological Equipment. Bacteriologist and Bacteriological Equipment. Equipment and Supplies.	\$49,670.00 1,918.77 8,275.41 1,820.00 776.49	\$63.460.67	\$37.400.00 1,918.77 8,275.41 1,820.00 776.49	\$3,000.00	\$9,270.00
OPHTHALMOLOGY Salaries Departmental Appropriation. Research Supplies.	\$70,916.68 2,000.00 7,785.70 6,163.65		4,856.67		66,060.01 7,785.70 6,163.65
OTO-LARYNGOLOGY Salaries Departmental Appropriation. Research	5,050.00 1,699.59 884.09	7,633.68	2,450.00		2,600.00
PATHOLOGY Salaries Departmental Appropriation Research	87,783.90 12,007.65 17,071.21		66,101.90	13,980.00	7,702.00 1,415.63 17,071.21

	REPO	кт ог тн	E TRE	ASUR	E R	25
2,400.00 50.00 2,279.91	970.00	36,228.33 4,090.00 51,896.89	8,301 66		44,824.13	750.00
	67,247.66 8,299.17 2,147.33	73,539.70 795.84 7,789.52		1,000.00	99,313.87 15,141.09 1,313.60	500.00
25,600 00 3,762.08		75,116.67	25,026.03 411.74	900.00	39,266.01	7,569.96
34 091 99		: : : : 6	: : :	: :		8,819.96
28,000.00 3,812.08 2,279.91	68,217.66 8,299.17 2,147.33 57.58	184,884.70 795.84 11,879.52 51,896.89 4,666.76	33,327.69 411.74 1,063.80	1,900.00	183,404.01 15,141.09 13,794.37	
PHARMACOLOGY Salaries Departmental Appropriation. Research	PHYSIOLOGY Salaries Departmental Appropriation Research Apparatus.	PRACTICE OF MEDICINE Salaries Salaries Departmental Appropriation Departmental Appropriation Research Tropical Diseases	PSYCHIATRY Salaries Departmental Appropriation Research	RADIOLOGY Salaries. Departmental Appropriation.	SURGERY Salaries Departmental Appropriation. Research	UROLOGY Salaries

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
Departmental Appropriation	\$2,635.95	\$11.455.91	\$2,485.95		\$150.00
PHOTOGRAPHIC LABORATORY Photographer Supplies.	3,900.00		: : : : : : : : : : : : : : : : : : :	\$238.90	3,900.00
HOSPITAL INSTRUCTION		4,138.90	200.00	:	
SLOANE HOSPITAL AND VANDERBILT CLINIC OPERATION AND MAINTENANCE Payments toward Operation and Maintenance	50,000.00	:	50,000.00		
to discharge \$20,000.00 annually of the University's obligation to pay \$70,000.00 annually, toward Operation and Maintenance	20,000.00	70.000.00	20,000.00	:	
DENTAL AND ORAL SURGERY (SCHOOL OF)  Salaries	246,853.97		244,063.51	2,790.46	
Dean's Appropriation Equipment and Supplies Research Research Student Health			41,351.14		3,997.17
NEW YORK POST-GRADUATE MEDICAL SCHOOL		293,032.58			900
Salaries	51,003.34 1,218.82				1,218.82
WORK IN GRADUATE MEDICINE.		52,222.16		2,222.16 5,232.67	5,232.67

TEACHERS COLLEGE Salaries	:	825,575.00			825,575.00	
BARD COLLEGE Salaries		42,604.40			42,604.40	
RETIRING ALLOWANCES	:	183,659.62	61,805.80	3,550.60	118,303.22	
WIDOWS' ALLOWANCES	:	55,746.03	10,010.00	1,717.53	44,018.50	$\mathbf{R}$
ANNUITIES.	:	153,687.79	108,627.18		45,060.61	ЕР
FELLOWSHIPS, SCHOLARSHIPS AND PRIZES						окт
FELLOWSHIPS Adams (Research)	900.00			900.00	:	0
Adams Publication	1,022.46			1,022.46		F
American Library Association.	1,000.00				1,000.00	7
American Council of Learned Societies	3,200.00				3,200.00	r 1
Baier (Victor) Music	861.00	:		861.00		I
Bridgham (Engineering)	1,045.20	:		1,045.20		Е
Cutting (W. Bayard)	4,400.00	:		4,400.00		Т
Drisler (Classical Philology)	1,500.00		1,500.00			R
DuPont	750.00	:			750.00	E
Duse	00.009	:			00.009	A
Ellis	3,200.00			3,200.00		S
Emmons	1,400.00			1,400.00		U
Evans (Traveling)	1,500.00	:		1,500.00		R
Faculty	800.00	:			800.00	E
Ferguson	835.00			835.00		R
Gilder (R. W.) (Political Science)	2,000.00		:	2,000.00	: : : : : : : : : : : : : : : : : : : :	:
Goldschmidt (Samuel Anthony) (Chemistry)	1,448.94	:		1,448.94		
Kellet	6,000.00			6,000.00		
Kemp (Geology)	820.00			820.00	***************************************	
Kendall (Edward Hale) (Architecture)	905.00		:	905.00		
McKim	2,087.50			2,087.50		•
Mitchell (William) (Letters of Science)	525.00	525.00		525.00		27

	Expenditures	Depart- mental Totals	From General Income	From Gifts Income and Receipt of Special for Endowments Designated	From Gifts and Receipts for Designated Purposes
Morris  Mosenthal National Lead Company Proudfit (Letters) Resident (Law) Roberts (Lydia C.) Squibb Company Trowbridge (Engineering) Tyndall University Whitney SCHOLARSHIPS Aid to Foreign Students	\$120.50 1,100.00 1,250.00 1,275.00 9,000.00 18,844.16 700.00 600.00 972.00 38,800.00 1,210.00	\$110,671.76	\$9,000.00	\$120.50 1,100.00 1,275.00 18,844.16 600.00 972.00	\$1,250.00 700.00 1,210.00
Aldrich (James Herman) (College).  Alma Mater (College).  Aldridge.  Aldridge.  Alnonymous.  Bangs (Law).  Bartow.  Bartow.  Beck (College).	205.00 820.00 72.25 1,067.50 45.20 50 255.00 1,175.00 1,175.00 894.21 82.00			205.00 820.00 72.25 1,067.50 255.00 1,175.00 894.21 82.00	45.20

	REI	PORT	OF	TH	E TR	EASU	JRER		2
200.00		1,525.00			180.00 400.00 541.00	180.00	180.00	50000	4,004,00
461.33 205.00 205.00	200.00 246.00 246.00	400.00	602.81 261.00 386.50	656.00 . 660.00 . 226.61 .	180 00	400.00	180.00	23,215.18	
1,800.00									
500.00   461.33   1,800.00   1,800.00   205.00   205.00	200.00 . 246.00 . 246.00 .	1,525.00 . 400.00 . 180.00 .	602.81 . 261.00 . 386.50 .	656.00 . 660.00 . 226.61 .	180.00 . 400.00 . 541.00 .	400.00 180.00 180.00	180.00 180.00 100.00 180.00	120.00 . 5.00 . 23,215.18 . 500.00 .	*,00.1.00(1.
Blossom (Engineering) Britton (Nathaniel Lord) (Geology) Brooklyn (Barnard College) Brooklyn (College) Burgess (Annie P.) (College). Burgess (Daniel M.) (College).	Business Alumni Butler (Richard) Campbell (College)	Carnegie Corporation Class of 1848 (College) Class of 1884.	Class of 1885, School of Mines. Class of 1887 (Mines). Class of 1892 (Rooms in Residence Halls).	Class of 1896 (College, Applied Science or Architecture). Class of 1904 (College). Class of 1907.	Class of 1908 Class of 1909 Class of 1910 Class of 1910	Class of 1913. Class of 1915. Class of 1917.	Class of 1917 (Engineering). Class of 1920 (Decennial) (Rooms in Residence Halls). Class of 1921. Class of 1924.	Class of 1925.  College Club of Cincinnati.  Collins (Perry McDonough) (College).  Columbia College Trinoscity Club.	Commission of the Commission o

	Expenditures	Depart- mental Totals	From General Income	From Gifts Income and Receipts of Special for Endowments Designated	From Gifts and Receipts for Designated Purposes
Crocchio Goliardico	\$150.00				\$150.00
Curtis (University)	750.00		\$750.00		
Cushman	1,200.00				1,200.00
DeWitt (Law)	770.00			\$770.00	
Dibblee (Ezra Reed) (Law)	256.50			256.50	
Dibblee (Frances M.)	256.50			256.50	
Edson	205.00			205.00	
Ellis (Law)	00.009			00.009	
Emergency Student Aid	84.50				84.50
Evans (College)	820.00			820.00	
Faculty	32,789.96		32,754.96		35.00
Fund in Aid of Deserving Students	108,666.29		97,543.26	7,663.66	3,459.37
Garibaldi	450.00			450.00	
Gibson (College)	410.00			410.00	
Gladney	129.60			129.60	
Hall (George Henry) (College)	594.50			594.50	
Hitchcock (Journalism)	1,000.00				1,000.00
Hopkins (Mary D.)	265.00				265.00
Horn	410.00			410.00	
Huber (College)	205.00			205.00	
Johnson (Resident)	458.00		458.00		
Killough (College)	1,506.26			1,506.26	
Lahey	202.00			205.00	
MacMahon (Journalism)	240.00			240.00	
Mason	410.00			410.00	
Mayer (Ralph Edward) (Engineering)	448.35			448.35	:
McClymonds (Louis K.) (College)	1,125.45			1,125.45	

Megrue (Roi Cooper) (College)	287.00	287.00
Megrue (Stella Cooper) (College)	287.00	287.00
Moffat (College)	82.00	82.00
Murtha	205.00	205.00
National Council of Jewish Women	500.00	200.000
New York State Library Association	325.00	325.00
New York State Scholarships	17,200.00	17,200.00
Perkins (History or Economics)	750.00	750.00
Phillips (Journalism)	810.00	810.00
Phillipson (Brainerd F.) (Engineering)	531.78	531.78
Pope.	577.50	577.50
President's Scholarship	2,438.75 2,438.75	
President's University.	1,500.00 1,500.00	
Professors (Sons of)	21,236.25 21,236.25	
Pulitzer Scholars	14,277.50 14,277.50	
Pulitzer Scholarships	11,215.41	11,215.41
Relief of Needy Undergraduates	50.00	
Residence Halls Graduate	26,170.67 26,170.67	
Rogers	221.40	221.40
Sackett (Henry W.) (Journalism)	490.00	490.00
Sanderson (Library Service)	300.00	300.00
Sandham (Anna M.) (Barnard College)	410.00	410.00
Saunders (Alex) (College or Engineering)	492.00	492.00
Saunders (Leslie M.) (College)	246.00	246.00
Schermerhorn (College)	205.00	205.00
Scranton	491.70	491.70
Sons of the Revolution	500.00	500.00
Society for Promotion of Religion and Learning (College)	1,984.00 1,984.00	
State Aid for Blind Pupils	2,400.25	2,400.25
Stuart (College)	270.00	270.00
Student Aid (College)	2,974.00 2,974.00	
Summer Session.	141.00	141.00
Todd	150.00	150.00
Turner (Charles Wesley) (College)	262.73	262.73
Vanderpoel	665.00	665.00

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
Van Sinderen (Howard) (Law). Wheeler (John Visscher) (College) Wheeler (H. A.) (Applied Science). Whitney Woodworth (Florence). Wyer (James I.) (Library Service).	\$475.00 492.00 246.00 440.00 300.00	\$316,250.47		\$475.00 492.00 246.00	\$440.00 300.00 300.00
RIZES AND MEDALS Anonymous (Auditing Laboratory) Barlonewall Prize Bjorkwall Prize Bouvier (Rowing) Brainard (Edward Sutliff) (College)	50.00 19.00 66.72 49.02			19.00 66.72 49.02 49.20	50.00
Butler (Nicholas Muray) Medals. Cabot (Maria Moors) Prize. Chandler Medal. Chandler Historical Prize. Class of 1912. Convers (Law).	25.50 1,471.22 7.35 54.00 61.50			25.50 7.35 54.00 61.50 75.00	1,471.22
Curtis Medal Darling (Mechanical Engineering) Darling (Mechanical Engineering) Eimer Medal Elsberg (Albert Marion) Prize (Modern History) Ewell (Octis W.) Prize (College) Fried (Otis W.) Prize (College) Fox (College) Green (Albert Asher) Prize (College) Haughton Illig Medals	65.00 53.50 25.50 95.00 155.00 23.02 55.00 303.52 105.00			65.00 65.00 25.50 95.00 156.00 23.02 55.00 308.52 106.00	

Jones (Adams Leroy) Memorial Prize	45.10	45.10
Montgomery (Robert H.) Prize (School of Business)	82.41	82.41
Newberry Prize	250.00	250.00
Ordronaux (John) Prize (Law)	125.05	. 125.05
Philolexian Prize	70.00	
Philolexian Centennial Prize	173.00	.   173.00
Protestant Episcopal Society's Seminary Prize	60.00	00.09
Pulitzer Prizes	15,500.00	. 15,500.00
Pulitzer Prizes (For Administration)	7,000.00	7,000.00
Research Corporation Awards	5,000.00	
Rhodes.	50.00	
Rolker (Charles M. Jr.) Prize (College)	50.00	. 50.00
Rosoff	25.00	
Seligman Prize.	200.00	
Toppan Prize	210.00	. 210.00
Van Am Medal	303.00	303.00
Van Amringe Mathematical Prize (College)	265.00	. 265.00
Van Buren (John Dash Jr.) Prize (Mathematics: College)	225.50	. 225.50
Van Rensselaer (English Verse)	50.00	
Warren	350.00	350.00
Wendell Medal	35.00	35.00
Woodberry	133.60	133.60
	33,107.71	
FELLOWSHIPS, SCHOLARSHIPS AND PRIZES AT THE MEDICAL SCHOOL		
Anonymous Scholershins	3 000 00	3.000.00
Anonymous Soholesshine	00 000 6	2 000 00
Blumenthal (George Jr.) Scholarships	800.00	
Clark (Alonzo) Scholarship.	00.009	
Cock Prize	70.00	70.00
Dennett (Scholarships)	6,935.00	6,935.00
Dental and Oral Surgery Scholarship	2,320.00	2,320.00
Devendorf (David M.) Scholarship.  Doughty (Francis E.) Scholarship.	200.00	400.00
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	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
Du Bois (Dr. Abram) Fellowship	\$738.00			\$738.00	
Gies (William J.) Fellowship.	774.97			774.97	
Harsen Scholarships.	800.00			800.00	
Hartley (Frank) Scholarship	100.00			100.00	
Hayden Foundation Scholarships.	6,975.00				\$6,975.00
Hemingway (W. H.) Scholarship	200.00			500.00	:
Holt (L. Emmett) Fellowship	900.00			900.00	
Huber (Francis) Scholarship	200.00			200.00	
Huber (Viola) Scholarship				212.50	
Jacobi (Abraham) Scholarship	650.00			650.00	
James (Walter Belknap) Fellowship	2,500.00			2,500.00	
Janeway Prize	41.00			41.00	
Markoe (Scholarships)	375.00	:		375.00	
McAneny (Marjorie) Scholarship	212.50			212.50	:
Proudfit (Maria McLean) Fellowship	1,200.00			1,200.00	
Research Fellowship	3,000.00		\$3,000.00		
Residence Hall Scholarships	7,541.60		6,313.85		1,227.75
Special Scholarships	150.00				150.00
Watson (Dr. William Perry) Prize	213.20			213.20	
		\$43,408.77			
		\$8,989,957.50	\$8,989,957.50 \$5,461,506.09		\$938,161.10 \$2,590,290.31

## EXPENSES—BUILDINGS AND GROUNDS

	Expenditures	Depart- mental Totals	From General Income	From From Gifts Income and Receipt of Special for Endowments Designated	From Gifts and Receipts for Designated Purposes
MORNINGSIDE HEIGHTS Salaries Wages Heat, Light and Power	\$12,400.00 181,320.82 150,880.00		\$12,400.00 181,320.82 134,239.63	\$16,640.37	
Gas.  Maintenance of Buildings and Grounds. Water	1,678.79 205,345.79 25,521.58		1,678.79 188,962.11 25,521.58	16,383.68	
Telephone Service Linoleum Flooring for Johnson Hall Maintenance of Faculty House Special Equipment. Maintenance of Casa de las Espanas. Maintenance of South Hall	55,468.54 1,720.00 8,876.90 249.43 1,440.37 73.402.30		55,468.54 1,720.00 8,261.79 249.43 1,440.37 73,402.30	615 11	
President's House Furnishing  BAKER FIELD AND BOAT HOUSES  Maintenance.  Boat Houses.	299.45 22,696.92 1,835.65	\$718,603.97	22,696.92	299.45	
MEDICAL AND DENTAL SCHOOLS Salaries Wages Steam and Refrigeration Gas. Maintenance.	6,500.00 63,706.61 26,589.71 1,115.50 21,686.17	24,032.0	6,500.00 63,706.61 26,589.71 1,115.50 21,686.17		

	Expenditures	Depart- mental Totals	From General Income	From Gifts Income and Receipts of Special for Endowments Designated	From Gifts and Receipts for Designated Purposes
Supplies. Electricity Maintenance of Ophthalmology Laboratories. Cost of Transfer of Pathological Work.	# T	\$11,655.05 13,331.49 2,200.00 940.05 \$147.724.58	\$11,655.05 13,331.49 940.05	13,331.49 1910.05	\$2,200.00
UNIVERSITY EXTENSION AND INSTITUTE OF PUBLIC ADMINISTRATION Maintenance of West 59th Street Property	3,000.00	20,998.86	17,998.86	3,000,00	
		\$911,859.98	\$875,721.37	\$33,938.61	\$2,200.00

### EXPENSES-LIBRARY

	Expenditures	Depart- mental Totals	From General Income	From From Gifts Income and Receipts of Special for Endowments Designated	From Gifts and Receipts for Designated Purposes
LIBRARY Salaries Sunday Opening	\$246,877.92	8949 475 59	\$241,777.92	\$1,500.00	\$3,600.00
AVERY LIBRARY Salaries Purchase of Books.	10,879.32 3,285.93 1,166.28	: : :	10,879.32 1,333.72 1,166.28	1,952.21	
BUSINESS (SCHOOL OF) READING ROOM Salaries. Books and Binding.	12,090.96		12,090.96 6,000.00	: : : : : : : : : :	284.02
CASA ITALIANA LIBRARY Maintenance and Service		605.42	:	605.42	
COLUMBIANA Salaries Purchases and Supplies.	713.41	1 498 49		713.41	285.08
ENGINEERING LIBRARY Salaries. Books and Binding.	8,002.45	11,902.45	8,002.45		

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
JOURNALISM LIBRARY Salaries. Books and Binding. Newspapers.	\$7,067.74 2,000.00 500.00	900		\$7,067.74 2,000.00 500.00	
LAW SCHOOL LIBRARY Salaries. Books and Binding	25,709.04 30,001.94	55.710.98	\$25,709.04 18,000.00	12,000.00	\$1.94
LIBRARY SERVICE (SCHOOL OF) Salaries. Books and Binding	8,190.00	11,190.00	8,190.00 3,000 00		
MEDICAL SCHOOL LIBRARY Salaries Books and Binding	14,258.81		14,258.81		
Draper Library. Grosvenor Library	85 00 92.34			85.00	
Huber Library Jacobi Library F C Locomon I there	208.47			208.47	
E.v.Janeway Lidary Phi Delta Epsilon. Dental Alumin Association	51.17			60.101.1	51.17
Webster. Weinstein Library.	721.44			34.00	721.44
ooks	263.08	28,226.29	263.08		

UNIVERSITY EXTENSION LIBRARY Books and Binding		310.39	310.39			
CATALOGUING CHINESE AND JAPANESE COLLECTION		3,288.58			3,288.58	
BOOKS AND SERIALS	:	44,961.79	44,964.79	:		
PURCHASES FROM SPECIAL FUNDS						RE
Art Professorship	1,000.00			1,000.00		Р (
Class of 1898	2,057.49			2,657.49		O F
Cotheal (Alexander)	520.52			520.52		T
Currier	1,479.31			1,479.31		'
Hamilton	22.38			22.38		C
Johnston (Edward W. S.)	46.39			46.39		) F
Loeb (James)	151.32			151.32		•
Lung (Dean)	1,500.00			1,500.00	:	Т
Miller (Nathan J.)	938.98			938.98		Н
Reckford (L. J.)	329.52	:		329.52		Е
Reisinger (Hugo)	77.24			77.24	:	
Schermerhorn	336 23			336.23	:	Т
Schurz	581.13			581.13		R
Wolffram	14.60			14.60		Е
		9,769.47				A
PURCHASES FROM GIFTS						S I
Benjamin	1,871.53	:			1,871.53	Ű
Anonymous	141.14	:			141.14	11
Epstean	240.01	:			240.01	Е
Moore,	370.00				370.00	R
Lawrence (Schuyler)	10.00				10.00	
Smith (David Eugene)	224.99	:			224.99	
Committee of Fifty	10.25				10.25	
Rockefeller Foundation	3,090.60				3,090.60	
Association of Lacedaemonians	85.00				85.00	
1		6,043.52		_		39
						)

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From From Gifts Income and Receipts of Special for Endowments Designated	
BINDING	\$22,442.11		\$22,442.11			
EMERGENCIES	2,075.08	:	2,075.08			0 0
SUPPLIES	9,899.43	:	9,899.43		:	
		\$34,416.62				
		\$500,676.77	\$500,676.77 \$448,019.90	\$38,341.12	\$14,315.75	
	1)					

## EXPENSES—BUSINESS ADMINISTRATION

	Expenditures	Depart- mental Totals	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes
Salaries Extraordinary Legal Expenses.	\$99,603.01 8,710.11		\$89,603.01		\$10,000.00
Treasurer's Office Sundries. Auditing Accounts. Special Corporation Expenses.	2,000.00 6,500.00 10,181.77 4 800 00		2,000.00 6,500.00 4,581.77 4 800 00	\$5,600.00	
Ollice Refu. 116th Street Tunnels—Franchises. Amsterdam Avenuel Franchise. Attorney's Office Fixoness	345.00 845.00 505.00 10.000.00		845.00 505.00 10,000.00		
Camp Columbia Taxes.		\$143,144.89 291.30	291.30		
Joint Administrative Board Expenses Office of the Bursar: Clerical Assistance Surolise and Feminment	49,098.55	1,163.59	1,163.59 49,098.55 6,571.57		
Office of the Purchasing Agent: Assistance and Supplies	27,995.11	55,670.12	27,995.11 60.00		
Insurance		43,251.06	43,251.06		
		\$271,576.07	\$255,976.07	\$5,600.00	\$10,000,00

\$13,455.72 \$13,455.72

\$21,392.95 82,585.64 \$103,978.59

\$21,392.95 96,041.36

President's Reserve Fund. Retiring Allowance Reserve Fund. \$117,434.31

### EXPENSES—ANNUITIES

Property						
Stiff on the control of the		Expenditures	Depart- mental	From General Income	From Income of Special	From Gifts and Receipts for
81,750,00 5,250,00 5,250,00 5,250,00 5,250,00 5,200,00 5,200,00 5,000,00 5,			SHED	Alleonie	Бичамиенся	Purposes
eship Fund.    5,250,00   \$600,00   \$700,00     7,500,00   \$7,500,00     1,611,92   1,611,92   1,611,92     4,703,10   4,703,10     4,703,10   4,103,00     6,145,42   138,50     6,145,42   138,50     6,145,42   138,50     6,145,42   138,50     6,145,42   138,35,00     6,145,42   138,35,00     6,145,42   138,35,00     6,145,42   138,35,00     6,145,42   138,35,00     6,145,42   138,35,00     6,145,42   138,35,00     6,145,42   138,35,00     6,145,42   138,35,00     7,500,00   2,227,22     7,000,00   2,227,	Frederic D. Barstow Fund	\$1,750.00			\$1,750.00	
eship Fund  2,700,00  7,500,00  7,500,00  7,500,00  7,500,00  1,611,92  4,703,10  4,703,10  4,103,00  8,000,00  9,000,00  9,000,00  9,000,00  9,000,00  1,138,00  1,13	W. S. Barstow Fund.	5,250.00			5,250.00	
ship Pund.	:	00.009		\$600.00		:
schip Fund  ont of Metallurgy  nent of Metallurgy  and display  Aid.  Ai	Edward R. Carpentier Fund.	2,700.00			2,700.00	
ship Fund. 1,611.92 2,227.22 2,000.00 600.00 1,611.92 1,6	H. W. Carpentier Fund.	7,500.00		7,500.00		
eship Pund.  1,611.92  4,703.10  4,7	Carlton C. Cartis Fund.	2,027,03			5. T. T. C.	
1,611.92 4,703.10 4,7	W. Bayard Cutting, Jr. Fellowship Fund.	00.009			600.00	
aent of Metallurgy 4,703.10 4,703.10 4,703.10 4,703.10 432.00 6,000.00 5,00	Hall J. How Fund.	1,611.92			1,611.92	
aent of Metallurgy aent of Metallurgy aent of Metallurgy aent of Metallurgy Aid.  Aid.  Aid.  2,421.50 9,000.00 2,421.50 3,923.23 4,138.60 13,835.00 6,145.42 13,835.00 872,102.99 88,100.00 861,002.99	Harriet S. Phillips Fund.	4,703.10			4,703.10	
nent of Metallurgy nent of Metallurgy nent of Physics  Aid. Physics  Aid. 2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,421.50  2,431.50  2,	Seidl Fund.	492.00			492.00	
Aid. Aid. Physics. Aid. 150 2,421,50 2,421,50 2,421,50 2,421,50 2,421,50 2,421,50 2,421,50 2,421,50 2,421,50 2,421,50 2,421,50 2,421,50 2,620 2,	Anonymous Fund for Department of Metallurgy	5,000.00			5,000.00	
Aid. 2,421.50 2,421.50 2,421.50 2,421.50 3,923.23 4,138.60 4,138.60 2,432.21 4,138.60 2,432.22 4,138.60 2,65.0	Anonymous Fund for Department of Physics	9,000.00			9,000.00	
A	Anonymous Fund for Student Aid.	2,421.50			2,421.50	
Fund, Pund, 6,145,42	Stanwood Cockey Lodge Foundation	3,923 23			3,923,23	
205.00  waship Fund.  (6.145.42  13,835.00  \$72,102.39  \$72,102.39  Waship Fund.	Schuyler Fiske Senger Fund,	4,138.60			4,138.60	
walip Pund.  13.835.00  13.835.00  \$72.102.99  \$72.102.99  \$72.102.99	James Renwick Unrrison Scholarship Fund	205.00			205.00	
### 13,835.00	William Campbell Fellowship Fund	6,145.42			6,145.42	
\$8,100.00		13,835.00			13,835.00	
EXPENSES COECIAL ABBRIDA ATTONIC		\$72,102.99				
	Cads sasnadxa	Orday IV	NOLLVIAG	9		

### INTEREST ACCOUNT

INTEREST PAID:

On Current Loans. \$16,200.76

On Loan of 1936. 154,447.96

\$170,648 72

### EXPENSES—SUMMARY

	Total	From General Income	From Income of Special Endowments	From Gifts and Receipts for Designated Purposes	From Allied Corporations
Educational Administration and Instruction Buildings and Grounds. Library. Business Administration. Annuities. Special Appropriations. Interest	\$8,989,957.50 911,859.98 500,676.77 271,576.07 72,102.99 117,434.31	\$5,461,506.09 875,721.37 448,019.90 255,976.07 8,100.00 103,978.59 170,648.72	\$938,161.10 33,938,61 38,341.12 5,600.00 64,002.99	\$2,590,290,31 2,200,00 14,315,75 10,000,00	\$90,290.31 2,200.00 14,315.75 10,000.00
Transferred from Gifts and Receipts for Designated Purposes	\$11,034,256.34 \$7,323,950.74 \$1,080,043.82	\$7,323,950.74	\$1,080,043.82	\$2,630,261.78 1,942,609.68	\$1,942,609.68
Transferred from Income of Special Endowments and Gifts.  Altschul (Benjamin)  Alumni Federaation of Columbia University  Burgess (John W.)  Carpentier (H. W.)  Class of 1892  Class of 1912  Eno (Amos F.)  Fire Insurance  Herningway (William H.)  Kennedy (John Stewart)  Van Cortlandt (Robert B.)		551,342.23	118.39 5.280.25 4.100.00 54.381.00 216.20 697.00 163.96 328,435.78 2.050.00 1.868.29 86,378.87	687,652.10	

						R	EΡ
00.000,	1,000.00	30,189.63	42.65	334.76	0.00	,210.45	\$1,942,609.68
					10.00		\$687,662.10
1,000.00	1,000.00	30,189.63		334.76		1,210.45	\$1,631,376.05
							\$11,034,256.34 \$6,772,608.51 \$1,631,376.05 \$687,662.10 \$1,942,609.68
							\$11,034,256.34
Killough for Economics.	Killough for English	Pell (Mary B.).	Class of 1893.	Class of 1897	Sage Gift.	Reussner (Ella)	

## STUDENT LOAN FUNDS

	Principal at June 30, 1938	Additions	Transferred at to Reserve June 30, 19	Principal at June 30, 1939	Loans	Balance
SPECIAL LOAN FUNDS						
Benedict	\$45.00			\$45.00	\$45.00	
Bertuch (Frederick)	27,963.22	\$702.09	\$702.09	28,665.31	15,812.83	\$12,852.48
Bishop (Cortlandt F.)	629.91	16.23		646.14	375.00	271.14
Blumenthal (George, Jr.)	48,410.29	2,726.30		51,136.59	41,602.14	9,534.45
Class of 1879, School of Mines.	5,423.21	204.76		5,627.97	4,871.07	756.90
Class of 1886	652.18			652.18	165.00	487.18
Class of 1887, School of Mines	15,431.98	775.88		16,207.86	15,265.19	942.67
Class of 1901	13,531.69	276.86	276.86	13,808.55	8,378.83	5,429.72
Class of 1904.	354.43			354.43	100.00	254.43
Class of 1906, Physicians and Surgeons	2,910.98	84.15		2,995.13	2,055.00	940.13
Class of 1908.	1,141.11	5,35		1,146.46	524.19	622.27
Class of 1910	999.15	3.25		1,002.40	406.00	596.40
Class of 1914, War Memorial	1,304.45			1,304.45	218.00	1,086.45
Class of 1916.	1,161.34	9.50		1,170.84	498.30	672.54
Clyde (Mrs. Ethel and Miss Edith)	4,067.85	48.82		4,116.67	3,012.26	1,104.41
Collins (Perry McDonough)	5,837.55	184.54		6.022.09	4,061.01	1,961.08
Dolphin	320.68	3.50		324.18		324.18
Engineering School	2,500.00	2.00		2,502.00	1,335.00	1,167.00
Gies (William J.).	8,048.08			8,048.08		8,048.08
Graham (Newton)	18,094.59	483.40		18,577.99	12,586.91	5,991.08
Homes (Henry F.)	5,710.09	88.96		5,806.97	2,252.15	3,554.82
Huber (Frederick W.)	117.17			117.17		117.17
Kearney (Phil)	2,688.80	59.34		2,748.14	1,233.23	1,514.91
Knapp	2,479.43	51.26		2,530.69	1,612.41	918.28
Koenig	10.00			10.00		10.00
Law School	81.36	:		81.36	67.50	13.86

Megrue (Roi Cooper) Emergency	5,027.48	420.35		5,447.83	367.00	5,080.83
Moore	200.00	44.49		200.00	2.093.00	2.085.86
Parter (David B and Wife)	2,066.16	1,195.49		3,261.65		3,261.65
Soth Low Timior College	967.77	12.50	:	980.27	876.00	104.27
School of Engineering (Harrington Scholarship)	465.00	30.00		495.00	:	495.00
Shoemaker (William Brock)	10,095.99	458.46		10,554.45	6,599.47	3,954.98
Stabler (Edward L.)	1,450.76	6.92		1,457.68	780.32	677.36
Students	39,759.70	1,083.67		40,843.37	30,464.25	10,379.12
Thirogenity Extension	4.384.31	142.53		4,526.84	3,746.69	780.15
Wright (Palmer)	617.74	199.63		817.37	515.00	302.37
Total Special	\$239,083.89	\$9,328.08		\$248,411.97	\$161,918.75	\$86,493.22
GENERAL LOAN FUNDS	\$634,155.75	\$23,048.72	\$11,324.49	\$645,879.98	\$534,792.08	\$111,087.90
Total of Special and General Loan Funds	\$873,239.64	\$32,376.80	\$11,324.49	\$894,291.95	\$696,710.83	\$197,581.12
Less Reserves.					85,690.30	
LOANS TO STUDENTS (Net)	:				\$611,020.53	

### BALANCE SHEET AS AT JUNE 30, 1939

ASSETS		General Funds	Special Endowments and Funds	Total
Cash		\$379,534.19	\$59,457.27	\$438,991.46
Notes Receivable— Bard College		232,700.00 55,603.98	2,308.20	232,700.00 57,912.18
Accounts Receivable— Sundry Debtors. Students (Less Reserve). Arrears of Rent (See Page 57).	\$243,043.04 9,979.04 49,834.36			
-	\$302,856.44	111,469.00	191,387.44	302,856.44
Inventories of Materials and Supplies Loans to Students (Less Reserves: General		286,843.67		286,843.67
Funds, \$63,610.61; Special Endowments and Funds, \$22,079.69;) (See Page 48) Rents Accrued—Not Due		471,181.47 595.83	139,839.06	611,020.53 595.83
Deferred Charges—Unexpired Insurance, etc. Advances—		64,155.70	27,589.96	91,745.66
Against Future Appropriations and Bequests On Account of Income of Special Endow-		72,921.60		72,921.60
ments and Gifts (See Pages 70 and 94) Investments of Deposits—Book Value (See			14,314.99	14,314.99
Contra) Securities Owned—Book Values (See Page 109)	`	9,800.00	29,798.58	39,598.58
Bonds. Stocks Bonds and Mortgages— Endowment Fund Mortgages on General Fund Rental Property, \$3,492,500.00	\$5,071,947.51 9,542,250.10			
and on Old Medical School Property, \$400,000.00 (See Contra) Other Guaranteed and Participation Certificates	3,892,500.00 11,819,372.90			
and Miscellaneous	293,623.42			
_	\$30,619,693.93	11,044.06	30,608,649.87	30,619,693.93
Rental Property—  *Upper Estate Land at 1935 Assessed Valuation.  *Lower Estate Land at 1935 Assessed Valuation.  Other Property, Including Buildings on	\$28,230,310.76 2,394,000.00			
Lower Estate Land, at Net Book Value General Funds (Less Reserve for De- preciation \$939,703.75) (Page 119)	6,402,202.29			
Special Funds (Less Reserve for Depreciation \$98,990.31) (Page 123)	9,950,596.60			
	\$46,977,109.65	37,026,513.05	9,950,596.60	46,977,109.65
University Land, Buildings and Equipment, at Cost (See Page 116)	\$40,153,444.82			
Less Reserve for Depreciation of Dining Halls Equipment	57,848.41	40,095,596.41		40,095,596.41
Loans—Due from Other Funds		78,817,958.96 143.49	41,023,941.97 576,522.62	119,841,900.93 576,666.11
	-	\$78,818,102.45	\$41,600,464.59	\$120,418,567.04

<sup>\*</sup>Upper Estate Land at 1939 Assessed Valuation \$29,152,376.43 \*Lower Estate Land at 1939 Assessed Valuation \$ 2,545,000.00

### BALANCE SHEET AS AT JUNE 30, 1939

LIABILITIES, RESERVES, FUNDS AND CAPITAL		General Funds	Special Endowments and Funds	Total
Notes Payable		\$1,410,000.00 211,362.83	\$62,589.26	\$1,410,000.00 273,952.09
Students. Others.	\$14.798.92 70,180.32			
_	\$84,979.24	30,751.51	54,227.73	84,979.24
Payments Received in Advance— Students' Fees Prepaid Rents—Rental Properties	\$364,278.49 5.670.42			
	\$36 <b>9,9</b> 48.91	367,376.58	2,572.33	369,948.91
Interest Payable Accrued		57,711.29 34,153.46	620.00	57,711.29 34,773.46
per Estate)	\$4,750,000.00			
Funds (See Contra)	400,000.00			
Rental Property— Note Payable—Secured by Mortgage Mortgages Payable to Special Endow-	100,000.00			
ments and Funds (See Contra)	3,492,500.00 500,000.00			9,242,500.00
Sundry Reserves; for: Notes and Accounts Receivable Requisitions Outstanding: Estimates. Contingencies. Amortization of Debt.	\$43,131.58 121,131.35 14,165.51 126,545.77			
	\$304,974.21	283,628.99	21,345.22	304,974.21
Unexpended Income of Special Endowments (See Page 70)			445,020.29	445,020.29
Unexpended Gifts and Receipts for Designated Purposes (See Page 94)			678,203.50	678,203.50
Endowments— Special Endowments (See Page 182)	\$40.322.620.72			3.0,200.00
Less Undistributed Losses	481,567.87		39,841,052.85	39,841,052.85
Student Loan Endowments (See Page 48). General Funds—			248,411.97	248,411.97
Student Loan Funds (See Page 48)  Permanent Funds (See Page 185)  Amortization —Loan of 1936	\$645,879.98 31,073,900.18 610,000.00			CC 050 959 19
Capital Account	34,520,592.96	66,850,373.12	41.054.049.15	66,850,373.12
Loans—Due to Other Funds (See Contra)		78,487,857.78 330,244.67	41,354,043.15 246,421.44	119,841,900.93 576,666.11
		\$78,818,102.45	\$41,600,464.59	120,418,567.04

## DETAILED FUND BALANCE SHEET AS AT JUNE 30, 1939

ASSETS	General Funds	Special Endowment Funds Principal Income	vment Funds Income	Gift Funds	Student Loan Funds	Invested in Plant	Total
Cash. Notes Repervable—	\$379,534.19	\$6,219.21	\$9,857.07	\$566.10	\$42,814.89		\$438,991.46
Tand College Bard College Cother Aconter Receivable—	232,700.00 55,603.98		2,308.20				$232,700.00\\57,912.18$
Sundry Debtors. Students (Less Reserve)	78,536.73	123,128.84	23,547.89	17,799.58	30.00		243,043.04
Arreas of Rent Interpreted to the Arreas of Arreas of Arreas of Arreas of Arreas and Supplies Inventories of Materials and Supplies Interpreted to Stridents of ass Recogner Convey Divide 662 611 611	22,953.23 286,843.67		26,881.13				9,979.04 49,834.36 286,843.67
	471,181.47		20 00 2		139,839.06		611,020.53
Advances Against Future Appropriations and Bequests. Advances to Be Refunded	72,921.60		635.95	13,679.04			91,745.66 72,921.60 14,314.99
Investment of Deposits (See Contra).  Securities Owned—Book Values—  \$5 071 947 51	9,800.00		29,798.58				39,598.58
Stocks  Stocks 9,542,280,10  Bonds and Mortgages on General Fund Endownent Fund Mortgages on General Fund Rental Pronerty \$3,495,500,00							
Medical School Property, \$400,000,00 (See Contral Other 1819, \$400,000 (See 1892,500,00 Other 1819,372,90			•				
Guaranteed and Participation Certificates and Miscellaneous							
\$30,619,693.93	11,044.06	29,666,448.09	516,737.50	407,051.78	18,412.50		30,619,693.93
Rental Property— *Upper Estate Land at 1935 Assessed Valuation \$28,230,310.76 *Lower Estate Land at 1935 Assessed Valuation 2,394,000.00	30,624,310.76		,				30,624,310.76
Other Property including Buildings on Lower Estate Land (Less Reserves for Depreciation—General Funds \$939.703.75; Special Endowments \$98,990.31)	6,402,202.29	9,947,111.37	1,000.00	2,485.23			16,352,798.89
University Land, Buildings and Equipment, at Cost Less Reserve for Depreciation of Dining Hall Equipment. 57,848.41						\$40,095,596.41	40,095,596.41
Loans—Due from Other Funds (See Contra)	38,722,362.55	39,742,907.51 158,982.84	638,356.28 117,462.97	441,581.73	201,096.45	40,095,596.41	119,841,900.93 576,666.11
*Ilmer Retale Land at 1980 Accessed	\$38,722,506.04	\$39,901,890.35	\$755,819.25	\$694,199.53	\$248,555.46	\$40,095,596.41	\$40,095,596.41 \$120,418,567.04

\* Upper Estate Land at 1939 Assessed Valuation ... \$29,152,376,43 \*Lover Estate Land at 1939 Assessed Valuation ... \$2,545,000.00

		R	EPOI	RT O	FTH	E	TRI	EASU	JR	ΕI	}			51
Total	\$1,410,000.00 273,952.09	14,798.92 70,180.32	364,278.49 5,670.42 57,711.29 34,773.46			9,242,500.00	43,131.58 121,131.35 14.165.51	126,545.77 445,020.29 678,203.50	39,841,052.85	894,291.95		119,841,900.93 576,666.11	\$120,418,567.04	vested
Invested in Plant						\$400,000 00				21 000 000 18	8,621,696,23	40,095,596.41	\$40,095,596.41	ance the total in
Student Loan Funds										\$248,411.97		248,411.97 143.49	\$248,555.46	amount to bals
Gift Funds	\$39.50						8 913 61	678,203.50				686,456.64	\$694,199.53	funds a sufficient
vment Funds Income	\$1,712.26	54,227.73	2,572.33				13,131.58	445,020.29				517,284.19 238,535.06	\$755,819.25	count in general
Special Endowment Funds Principal Income	\$60,837.50								39,841,052.85			39,901,890.35	\$39,901,890.35	een subtracted from capital account in gene
General Funds	\$1,410,000.00 211,362.83	14,798.92 15,952.59	364,278.49 3,098.09 57,711.29			8,842,500.00	30,000.00 121,131.35	126,545.77		645,879.98	610,000.00 25,898,896.73	38,392,261.37 330,244.67	\$38,722,506.04	s been subtracte
LIABILITIES, RESERVES AND FUNDS	Notes Payable Accounts Payable	Deposits— Students. Others (See Contra \$39,788.06)	Payments Received in Advance— Students, Fees. Prepaid Rents—Rental Properties Differest Payable Accrued.	m.c	Rental Property—   Note Payable Payable to Endowment Funds   3,492,500.00     Cale Contral   Second Payable   Second Payabl	\$9,242,500.00	Sundry Keserves; 10: Notes and Accounts Receivable Requisitions Outstanding: Estimates	Contingencies. Amortzation of Debt Unexpended Income of Special Endowments. Principal of Gifts.	Principal of Special Endowments	Student Loan Funds.	Flant Funds (Permanent)   Amortization—Loan of 1936   *Capital	Loans—Due to Other Funds (See Contra)		*In preparing this detailed fund balance sheet, there has been subtracted from capital account in general funds a sufficient amount to balance the total invested

in plant in excess of permanent plant funds.

### CAPITAL ACCOUNT

### FOR THE YEAR ENDED JUNE 30, 1939

Capital, June 30, 1938			\$34,954,813.36
Add:			
Unexpended Balance of Requisitions Of	utstanding at		
June 30, 1938		\$2,446.53	
Deduct:			
Alterations and Replacements in			
Academic Properties	\$38,039.36		
Transfer to Reserve for Doubtful Notes			
and Accounts Receivable	13,463.98		
Sundry Transfers to Gifts	14,099.95		
Sundry Transfers to Special Funds			
(Net)	2,413.28		
Sundry Transfers to Student Loan			
Funds (Net)	1,765.93		
Adjustment of Fees and Expenses			
Applicable to Prior Years (Net)	3,832.12	73,614.62	
_			71,168.09
		-	\$34,883,645.27
Deduct:			
Excess of Expenses for Maintenance ov	er Income for		
the Year Ended June 30, 1939 after	Providing for		
Amortization of Loan of 1936		_	363,052.31
Capital, June 30, 1939		· • • • • • • • • • • • • • • • • • • •	\$34,520,592.96
		=	

NEW YORK, N Y
BOSTON, MASS
SPRINDFIELD, MASS
CLEVELAND, OHIO
CHICADO, ILL
PHILADELPHIA, PA
NEW HAVEN, CONN
SYRACUSE, N, Y
BUFFALO, N Y
KANSAS CITY, MO
SAN FRANCISCO, CAL

### Scovell, Wellington & Company Accountants and Auditors

C.OLIVER WELLINGTON HORACE G CROCKETT HAROLO S MORSE JOHN F SENGSTACK

HI BROADWAY

New York, September 15, 1939

To the Board of Trustees, Columbia University in the City of New York.

We have examined the balance sheets of Columbia University in the City of New York as at June 30, 1939, and the statements of income and expenses and capital account for the fiscal year then ended. We have reviewed the system of internal control and the accounting procedures of the University, and, without making a detailed audit of the transactions, have examined or tested accounting records of the University and other supporting evidence by methods and to the extent we deemed appropriate.

Securities are carried at book values which represent purchase costs less amortization of premiums, or market values at the dates of acquisition through gift.

The land holdings known as the Upper and Lower Estates are carried at the 1935 City of New York assessed valuations. In accordance with practices adopted in prior years, other rental properties of the University, including buildings on the Lower Estate, are carried on various bases, such as cost, cost plus carrying charges, assessed valuations or, in a few instances, appraised or nominal values. In providing for depreciation, the practice has not been consistent as between properties, and in general the provisions have not been adequate to amortize the costs of the properties over reasonable estimates of their useful lives. On the income statement there is included \$ 305,000 for amortization of Loan of 1936 which was provided in the budget. The emortization of \$ 305,000 and the same amount provided in the previous year, or a total of \$ 610,000, will be restored to capital account when the Loan of 1936 is fully paid.

The University land, buildings and equipment are carried at cost, or assessed value at the date of acquisition through gift. No depreciation has been provided except on equipment in the dining halls.

In our opinion, based upon such examination and accepting the valuations of securities and properties as stated above, the accompanying balance sheets and statements of income and expenses and capital account (pages 5 and 49 to 53) fairly set forth the financial condition of the University as at June 30, 1939 and the results of its operations for the year ended at that date.

Scoult listlington lompany

### PAYMENTS BY ALLIED CORPORATIONS

(1)	Salaries and Annuities Account Barnard College. Credited to the following Departments:		
	General University Administration	\$35,500.00	
	Office of the Registrar	5,000.00	
	Anthropology	4,750.00	
	Botany	16,800.00	
	Chemistry	22,300.00	
	Economics	18,800.00	
	English and Comparative Literature	54,400.00	
	Fine Arts	11,600.00	
	Geology	12,100.00	
	Germanic Languages	17,000.00	
	Greek and Latin	11,400.00	
	History	21,800.00	
	Mathematics	16,700.00	
	Music	11,100.00	
	Philosophy and Psychology	36,650.00	
	Physical Education	28,600.00	
	Physics	5,600.00	
	Public Law	15,100.00	
	Religion	1,000.00	
	Romance Languages	38,500.00	
	Social Science	8,650.00	
	Zoology	28,300.00	
	Library	3,600.00	
	Business Administration	10,000.00	
	Annuity Contributions	15,774.12	
	Retiring Allowances	6,019.36	
(2)	Salaries and Annuities Account Teachers College. Credited to the following Departments:  General University Administration	18,000.00	\$457,043.48
	Food Chemistry	1,180.00	
	Education and Practical Arts	825,575 00	
	Institute of Public Health	1,010.00	
	Annuity Contributions	41,818.91	
	Retiring Allowances	7,065.00	
	_		894,648.91
(3)	Carnegie Foundation. Credited to the following:		
	Retiring Allowances	105,218.86	
	Widows' Allowances	44,018.50	
	-		149,237.36
(4)	Presbyterian Hospital. Credited to the following:		
	Laboratories	26,500.00	
	Ophthalmology	73,063.66	
	School of Nursing	58,918.86	
	Annuity Contributions	923.30	
	Scientific Research	97,804.13	
	<del>-</del>		257,209.95
(5)	Bard College. Credited to the following:		
(6)	Salaries		42,604.40
	pital. Credited to the following:		E0 E00 04
(77)	Salaries		58,503.34
(7)	Babies Hospital. Credited to the following:		00.015.50
(0)	Salaries.		60,017.50
(8)	Neurological Institute. Credited to the following: Salaries		23,344.74
	Salaites	-	\$1,942,609.68
			ų 1,0 12,000.00

### ARREARS OF RENT, JUNE 30, 1939 RENTAL PROPERTIES

### LOWER ESTATE

51 Barclay Street. 53 Barclay Street. 61 Barclay Street. 65-7 Barclay Street. 65-7 Barclay Street. 69-73 Barclay Street. 75-9 Barclay Street. 23 Barclay Street. 231-5 Greenwich Street. 239-43 Greenwich Street. 239-43 Greenwich Street. 245-7 Greenwich Street. 252-4 Greenwich Street. 252-4 Greenwich Street. 253-9 Greenwich Street. 261-7 Greenwich Street. 56-8 Murray Street. 68 Murray Street. 70 Murray Street. 72 Murray Street. 72 Murray Street. 73 West Broadway. 28-30 West Broadway. 28-80 West Broadway. 48 West Broadway.	\$1,729.17 22.60 51.21 718.77 1,149.25 741.68 7 70 488.76 458.65 416.00 166.67 1,624.05 45.00 300.15 247.45 50.00 413.85 250.00 650.01 230.25 71.45	
52 West Broadway	363.50	
_		\$10,196.17
OTHER PROPERTIES		
115th Street and Amsterdam Avenue	75.00	
21 Claremont Avenue	180.00	
29-35 Claremont Avenue	507.00	
39-41 Claremont Avenue	300.25	
70 Haven Avenue	578.75	
70 Morningside Drive and 400 West 118th Street	3,978.40	
445 Riverside Drive	190.19	
460-4 Riverside Drive	1,126.19	
18 East 16th Street	746.67	
41 West 47th Street	1,186.25	
524-8 East 73rd Street	625.00	
403 West 115th Street	460.94 317.50	
424-30 West 116th Street	1,648.74	
430 West 118th Street	836.18	
450 West 116th Street	030.10	12,757.06
		,
ENO ESTATE		
1680 Broadway	13,436.46	
1910 Broadway	200.68	
5-7 Mercer Street	674.46	
133 Roosevelt Street and 293 Front Street	20.00	
19 South William Street	210.00	
50 Washington Square South	3,039.80	
427-31 West Broadway	1,112.91 15.00	
474-8 West Broadway	561.05	
13 West 60th Street.	45.00	
10 11 CDs 0004 DMCCs,	10.00	

15 West 60th Street	20.00 145.00 99.00	19,579.36
PHOENIX ESTATE		
92 First Avenue	45.00 49.00 55.00	149.00
SPECIAL FUNDS—UNALLOCATED		
636 Eighth Avenue. 812 Eighth Avenue. 106-8 Fulton Sgreet. 306 Lexington Avenue. 450 Riverside Drive. 136-40 West 23rd Street. 3-7 East 27th Street. 25-7 West 30th Street. 335-43 West 35th Street. 19-21 West 36th Street.	412.44 662.74 3,052.50 172.00 933.48 213.34 641.88 60.00 436.81 273.88 232.20	7,091.27
HEMINGWAY ESTATE		
237 Grand Street, Jersey City		23.50
CARDOZO ESTATE		
224 East 7th Street		38.00
		\$49,834.36

## UNDERGRADUATE AND SERVICE ACTIVITIES

Income.  Expense.  Net Income (See Page 5).		\$431,990.72	\$64,840.31
Income.  Expense.  Net Income (See Page 5).		\$271,715.96 266,298.67	\$5,417.29
ATHLETICS INCOME General Athletics— Receipts From University Appropriation	\$21,688.38 88,085.87	\$109,774.25	
Football—Receipts		195,077.13	
General Athletics. Football.	109,774.25	\$304,851.38	
Balance Credited to Income			\$71,509.88
SUMMARY Total Credit to Income (See Page 5).  Total Charge to Expense (See Pages 5, 20)		\$71,509 88 88,085.87	
Net Deficit from Athletics	:	\$16,575.99	

# RECEIPTS AND DISBURSEMENTS OF INCOME OF SPECIAL ENDOWMENTS FOR THE YEAR ENDED JUNE 30, 1939

	Debit Balances June 30, 1938	Credit Balances June 30, 1938	Received 1938-1939	Total Credits	Expended 1938-1939	Debit Balances June 30, 1939	Credit Balances June 30, 1939
Adams (Ernest Kempton)		\$1,743.76	\$2,665.00	\$4,408.76	\$1,922.46		\$2,486.30
Aldrich (James Herman)			205.00	205.00	205.00		
Aldridge (Walter H.)		833.75	1,025.00	1,858,75	1,067.50		791,25
Altschul (Benjamin)			118.39	118.39	118.39		
Alumni Scholarship		76.50	73.84	150.34	72.25		78.09
Alumni War Bonus		4,939.60	1,495.26	6,434.86			6,434.86
Anonymous for Cancer Research		30.47	410.00	440.47	440.47		
Anonymous for Church and Choral Music			4,141.00	4,141.00	4,141.00		
Anonymous for the Department of Metallurgy		2,402.78	4,100.00	6,502.78	5,000.00		1,502.78
Anonymous for Department of Physics			15,737,28	15,737.28	13) 15,737.28		
Anonymous for Student Aid			2,421.50	2,421.50	2,421.50		
Art Professorship			4,100.00	4,100.00	4,100.00		
Avery Architectural		2.21	2,050.00	2,052.21	1,952.21		100.00
Baier (Victor)			861.00	861.00	861.00		
Bangs (Francis Sedgwick)		3.13.00	2.16.00	589.00	255.00		334.00
Barker (Clarence) Musical		01.99	1,189.00	1,255.10	1,175.00		80.10
Barker (Mary Perin)		6.35	158.15	161.50	161.50		
Barlow Medals		421.15	90.20	511.35	19.00		492.35
Barnard Fellowship		2,336.31	410.00	2,746,31			2,746.31
Barnard Library		889.18	3,109.85	3,999.03 (1)	1) 2,717.49		1,281.54
Barnard (Margaret)			666.25	666.25 (2)	2) 666.25		
Barstow (Frederic D.)		405.85	1,976.10	2,381.95	2,336.30		45.65
Barstow (W. S.)		2,937.76	5,990.21	8,927.97	8,372.91	:	555.06
Bearns (Joseph H.)		726.82	974.61	1,701.43	:::::::::::::::::::::::::::::::::::::::		1,701.43
Beck Prize	:		328.00	328.00	326.53		1.47
Beck Scholarship			82.00	82.00	82.00		

427.18     4.133.90       4.10.6     4.40.88       4.10.16     4.40.88       4.10.16     4.40.88       8.64.97     8.30.9       64.37     8.30.9       65.236.64     4.317.23       4.20.00     6.236.44       4.100.00     4.100.00       4.100.00     4.92.0       1.045.50     1.045.20       1.045.60     1.045.20       205.00     205.00       205.00     205.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       4.100.00     4.100.00       3.857.60     25.50       246.00     246.00       246.00     246.00       8.20.60     820.00       6.150.00     10.250.00       6.150.00     10.250.00       820.00     10.250.00       820.00     10.250.00       820.0	Beekman (Gerard)			410.00	410.00	410.00		
100		:	3,706.72	427.18	4,133.90			4,133.90
application         application         4481.17         4657.49         8176.32         673.57           18.72         6.236.64         4,481.17         4,643.66         8,764.56         8,765.61         16.37           18.72         6.236.64         8,309         6,236.44         1,000.00         4,100.00			409.88	41.00	450.88			450.88
652.26         3,664.37         4.317.23         3.643.66         672.57         673.57           165.70         2,465.90         4.300.00         4.100.00         4.100.00         4.100.00           511.61         2,465.90         4.100.00         4.100.00         4.100.00         4.100.00           abeth Gertrude)         289.42         9.20         4.02.50         1.045.20         4.92.0         4.37.4           abeth Gertrude)         84.89         82.09         666.89         205.00         205.00         487.41         487.41           abeth Gertrude)         1,245.60         1,045.50         1,045.20         2.30         666.89         587.48           abeth Gertrude)         84.89         82.09         666.89         205.00         205.00         206.60           abeth Gertrude)         1,710.60         4,100.00         4,100.00         4,100.00         1,545.20         66.89         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.71         487.72         487.72         487.72         487.72         487.72 <td></td> <td></td> <td>379.50</td> <td>4,101.67</td> <td>4,481.17</td> <td>4,657.49</td> <td></td> <td></td>			379.50	4,101.67	4,481.17	4,657.49		
18.72   64.37   83.09   66.72   16.37   16.37   16.37   16.37   16.37   16.37   16.37   16.37   16.37   16.38   16.3	riek)	:	652.26	3,664.97	4,317.23	3,643.66		673.57
abeth Gertrude).	rles H.) Prize		18.72	64.37	83.09	66.72		16.37
100	dowment		2,465.90	6,236.64	8,702.54	6,236.44	:	2,466.10
rial 611.61 254.20 765.81 4.00 765.81 4.00 765.81 4.00 765.81 4.00 765.81 4.00 765.81 4.00 765.81 4.00 76.81 4.00 76.81 4.00 76.82 4.00 76.82 7	G			4,100.00	4,100.00			4,100.000 ₹
rial 61.73 41.00 102.73 49.02 53.71 rial abeth Gertrude) 289.42 9.045.50 1.045.50 1.045.20 3.0 abeth Gertrude) 584.89 82.00 666.89 205.00 205.	did		511.61	254.20	765.81			765.81
rial 49.20	rrgeant) Cup	:	61.73	41.00	102.73	49.02	:	53.71 °
abeth Gertrude) 283,489 280,00 1,045.50 1,045.20	ard Sutliff) Memorial		:	49.20	49.20	49.20	:	:
abeth Gertrude)         289.42         950.32         1,248.74         761.33         487.41           abeth Gertrude)         584.89         282.00         666.89         666.89         666.89           205.00         205.00         205.00         205.00         666.89         666.89           1,234.58         1,234.58         123.00         4,100.00         4,100.00         1,154.3           1,234.58         123.00         1357.38         205.00         1,154.3         1,154.3           1,505.51         66.49         116.55         183.04         168.99         114.05           1,505.52         246.00         246.00         246.00         14.105         14.05           1,505.21         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04           1,505.21         1,505.21         6,150.00         1,550.00         1,550.00         1,505.21           1,505.21         6,150.00         1,655.00         820.00         820.00         1,505.21           1,505.21         1,505.00         10,250.00         10,250.00         1,505.01         1,505.21           1,505.21         12,304.10         34,01         34,01         11,608.56         11,608.56	uel Willard)			1,045.50	1,045.50	1,045.20		₹ <b>1</b> 90.
\$584.89         \$82.00         \$66.89         \$66.90	niel Lord and Elizabeth Gertrude)		289.42	950.32	1,248.74	761.33		487.41
205.00         205.00         205.00         205.00         205.00         205.00         205.00         205.00         205.00         205.00         151.43         152.03<			584.89	82.00	68.999			0 68.999
ep         205.00         205.00         205.00         151.13           er)         1,103.4.58         1,100.00         4,100.00         4,100.00         1,100.00	P.) Scholarship.			205.00	205.00	205.00	:	F
er)         4,100,00         4,100,00         4,100,00         151,43           er)         66,49         123,46         123,00         246,00         246,00         1332.08           er)         66,49         116,55         183,04         168,99         1405         1405           sp, 289,93         75,60         246,00         246,00         246,00         246,00         1405           ip         77,05         156,60         230,67         6,145,42         214,75         3,891.04           sp, 289,93         75,60         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04           ip         7,505,21         61,50.00         1,345,61         1,506,21         1,506,21         1,506,21           ip         7,017,27         820.00         13,41,61         2,200.00         13,41,61           fe,44401         76,44         11,608,56         11,608,56         11,608,56         11,608,56	I M.) Scholarship			205.00	205.00	205.00	:	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	W.)			4,100.00	4,100.00	4,100.00		T
1,234.58         123.00         1,357.58         25.50         1,332.08           2,66.49         116.55         136.39         246.00         246.00         246.00         14.05           \$2,289.93         8,220.60         5,330.67         6,145.42         214.75         3.891.04           \$2,289.93         8,220.60         5,330.67         6,145.42         214.75         3.891.04           \$3,891.04         3,891.04         3,875.00         1,556.21         6,150.00         1,556.01           \$20,00         1,311.67         820.00         820.00         1,311.67           \$2,831.00         10,250.00         10,250.00         54,831.00         7,321.37           \$4,831.00         54,831.00         54,831.00         7,321.37           \$4,401         11,685.00         11,608.56         11,608.56	ii Scholarship		171.06	180.37	351.43	200.00		151.43 H
9         246.00         246.00         246.00         246.00         246.00         14.05         14.05           35.85         35.86         116.55         183.04         168.99         14.05         14.05           \$2.289.93         8,220.60         5,930.67         6,145.42         214.75         3.821.04           \$2.20.60         5,930.67         6,145.42         214.75         3.821.04           \$3.891.04         3,821.60         3,075.00         7752.60           \$2.20.00         1,505.21         6,150.00         1,311.67           \$2.00         820.00         820.00         13.11.67           \$2.20.00         820.00         54.831.00         1,250.00           \$2.20.00         54.831.00         54.831.00         7,321.37           \$2.20.00         7.231.37         12.304.01         344.01           \$2.20.00         11,685.00         11,685.00         7,321.37	s Murray) Medal		1,234.58	123.00	1,357.58	25.50		1,332.08 <del>T</del>
htuyler) 66.49 116.55 183.04 168.99 14.05	))			246.00	246.00	246.00		1
\$5.85         355.85 </td <td>Edwards Schuyler)</td> <td></td> <td>66.49</td> <td>116.55</td> <td>183.04</td> <td>168.99</td> <td></td> <td>14.05</td>	Edwards Schuyler)		66.49	116.55	183.04	168.99		14.05
\$22,289.93         \$220,60         5,930,67         6,145.42         214.75         3,891.04           sorship         752,60         3,075.00         3,876.00         3,075.00         7,532.00           sorship         1,506,21         6,150.00         7,655.21         6,150.00         1,505.21           r         741.67         600.00         1341.67         820.00         1341.67           s         820.00         10,250.00         10,250.00         13,250.00           r         7,017.27         12,301.01         54,831.00         54,831.00           r         7,644         11,685.00         11,608.56         11,608.56	ne Wilson)		355.85		355.85			355.85 ₹
\$22.66 5.930.67 6,145.42 214.75 3.891.04  sorship  1,565.21 6,150.00  1,31.67 600.00  1,31.67 600.00  1,31.67 600.00  1,31.67 600.00  1,31.67 600.00  1,31.67 820.00  1,31.67 820.00  1,31.67 820.00  1,31.67 820.00  1,31.67 820.00  1,31.67 820.00  1,31.67 820.00  1,31.67 820.00  1,31.67 820.00  1,31.67 820.00  1,250.00  1,250.00  1,250.00  1,250.00  1,250.00  1,250.00  1,250.00  1,240.01  1,685.00  1,685.	arship		:	246.00	246.00	246.00		€ .
sysp.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         3,891.04         4,652.0         7,526.00         7,526.00         1,506.21         1,506.21         1,506.21         1,506.21         1,506.21         1,506.21         1,506.21         1,506.21         1,311.67         1,311.67         1,311.67         1,311.67         1,311.67         1,311.67         1,311.67         1,311.67         1,311.07         1,250.00         1,250.00         1,250.00         1,311.07         1,311.01         1,410.11         344.01         3,41.01         3,41.01         1,608.56         1,1,608.56         1	iam)	\$2,289.93		8,220.60	5,930.67	6,145.42		
sorship         752.60         3.075.00         3.827.60         3.075.00         1,505.21         6,150.00         7,655.21         6,150.00         1           741.67         820.00         1.341.67         820.00         820.00         10,250.00           10,250.00         10,250.00         10,250.00         10,250.00         10,250.00           7,017.27         12,304.10         344.01         344.01         344.01           76,44         11,685.00         11,608.56         11,608.56         11,608.56	min N.)			3,891.04	3,891.04			
oorship         1,505.21         6,150.00         7,655.21         6,150.00         1           741.67         600.00         1.341.67         820.00         820.00           820.00         820.00         10,250.00         10,250.00           7,017.27         12,304.10         19,321.37         12,000.00           7,644         11,685.00         11,608.56         11,608.56         11,608.56	ew)		752.60	3,075.00	3,827.60	3,075.00		752.60
741.67     600.00     1,341.67     820.00       820.00     820.00     820.00       10,255.00     10,255.00     10,255.00       7,017.27     12,304.10     19,321.37       11,685.00     11,608.56     11,608.56	ration Professorship.		1,505.21	6,150.00	7,655.21	6,150.00		1,505.21
S20.00   S	ration		741.67	00.009	1,341.67			1,341.67
10,250.00     10,250.00     10,250.00       54,831.00     54,831.00     54,831.00       7,017.27     12,304.10     19,321.37       344.01     344.01       76,44     11,685.00     11,608.56	rence)		:	820.00	820.00	820.00	:	:
54,831.00     54,831.00     54,831.00       7,017.27     12,304.10     19,321.37       344.01     344.01       76,44     11,685.00     11,608.56	ward R.)			10,250.00	10,250.00	10,250.00		
7,017.27 12,304.10 19,321.37 12,000.00 344.01 344.01 344.01 344.01 344.01 11,608.56 11,608.56	W			54,831.00	54.831.00	54,831.00		
76.44 344.01 344.01 344.01 11,685.00 11,608.56	nes S.)		7,017.27	12,304.10	19,321,37	12,000.00		7,321.37
76,44  11,685.00  11,608.56	ndowment		: : : : : : : : : : : : : : : : : : : :	344.01	344.01	344.01		
	ton Young)	76.44		11,685.00	11,608.56	11,608.56		

	Debit Balances June 30,	Credit Balances June 30,	Received	Total Credits	Expended 1938-1939	Debit Balances June 30.	Credit Balances June 30
	1938	1938				1939	1939
Center Fund			\$7,380.00	\$7,380.00	\$7,380.00		
Chamberlain (Joseph P.)		\$4,920.27	6,223.49	11,143.76	6,000.00		\$5,143.76
Chamberlain (Lydia C.)		20,460.33	18,000.00		(3) 19,804.49		18,655.84
Chandler (Charles Frederick)		777.61	307.50	1,085.11	7.35		1,077.76
Chanler Prize		147.75	45.10	192.85	54.00		138.85
Chapel Furnishing		205.26	15.62	220.88	44.56		176.32
Chapel Music.		1.51	43.05	44.56			44.56
Civil Engineering Fire Testing Station		1,450.05	533.00	1,983.05			1,983.05
Civil Engineering Testing Laboratories Fund		1,500.68	1,151.24	2,651.92	702.35		1,949.57
Class of 1848 Scholarship		24.75	410.00	434.75	400.00		34.75
Class of 1869		70.55	4.10	74.65			74.65
Class of 1881 Arts and Mines		469.08	82.00	551.08	83.68		467.40
Class of 1884		18.89	164.00	182.89	180.00		2.89
Class of 1885 Mines		42.51	579.13	621.64	602.81		18.83
Class of 1886		132.00	94.71	226.71			226.71
Class of 1887 Mines	\$59.22		328.00	268.78	261.00		7.78
Class of 1888 Arts and Mines		133.00	16.40	149.40			149.40
Class of 1888 College and Engineering	:	7.24	103.32	110.56			110.56
Class of 1889 Medal		41.45	20.50	61.95			61.95
Class of 1892 Arts and Mines		:	602.70	602.70	602.70		
Class of 1893 Memorial			42.65	42.65	42.65		
Class of 1896 Arts and Mines			656.00	656.00	656.00		
Class of 1897.			334.76	334.76	334.76		
Class of 1898		63.71	260.55	324.26	114.36		209.90
Class of 1901 Decennial			57.40	57.40	57.40		
Class of 1902		:	697.00	697.00	697.00	: : : : : : : : : : : : : : : : : : : :	
Class of 1904		2.04	660.10	662.14	00.099	:	2.14
Class of 1907 College and Engineering		-:	275.19	275.19	226.61		48.58

Class of 1911.		403.28 36.00	41.00 184.50 163.96	444.28 220.50 163.96	180.00		444.28
Class of 1912 Law		63.75	61.50	125.25	61.50		63.75
Class of 1913 Scholarship		. 85	557.05	557.05	400.00		157.05
Class of 1916 Law Scholarship		99.6	25.27	34.93			34.93
Class of 1917 Scholarship		14.47	184.70	199.17	180.00		19.17
Class of 1917 Engineering		:	.12	.12			21.
		6.55	184.50	191.05	180.00		11.05
Class of 1921 Scholarship	49.51	:	149.51	100.00	100.00		, 1
		14.26	25.81	40.07			40.07
		12.11	11.69	23.80			23.80
Class of 1926		9.39	15.21	24.60			24.60
			53.33	53.33	53.33	3	r
Class of 1927 Library Endowment		5.48	5.90	11.38			11.38
		7.43	5.39	12.82			12.82
Class of 1935 Law Scholarship		4.67	3.05	7.72			7.72
Collins (Perry McDonough)		37.64	23,206.00	23,243.64	23,215.18		28.46
Columbia Alumni in Memoriam		28.16	54.32	82.48	55.32		27.16
Columbia Alumni in Perpetuity		85.00	164.00	249.00	167.00		82.00
Columbia University Football Association			411.55	411.55	411.55		
Columbia Hudson Fulton Prize		237.23	41.00	278.23			278.23
Columbia University Permanent Alumni			5,280.25	5,280.25	5,280.25		1 2
Jolumbiana Endowment		238.98	1,278.24	1,517.22	1.213.41	1	303.81
		283.38	54.10	337.48	75.00	· · · · · · · · · · · · · · · · · · ·	262.48
Jotheal (Alexander I.)		109.52	698.03	807.55	520.52	21	287.03
Crocker (George)		74,295.33	60,885.00	135,180.33	55,247.82	2	79,932.51
Crosby (William O.)		115.81	69.70	185.51	77.90		107.61
		438.25	40.80	479.05	479.05		
Surrier (Nathaniel)		745.84	2,050.00	2,795.84	1,479.31		1,316.53
		23,944.08	2,227.22	26,171.30	2,227.22	2	23,944.08
		4,207.72	410.00	4,617.72			4,617.72
Curtis (George William)		183.34	53.30	236.61	65.00	0	171.64

	Debit	Credit	4			Debit	Credit
	Balances	Balances	Received	Total	Expended 1938-1939	Balances June 30	Balances
	1938	1938	2001-0001	3		1939	1939
Cutting (W. Bayard)		\$3,027.71	\$6,560.00	\$9,587.71	\$4,400.00		\$5,187.71
Cutting (W. Bayard, Jr.).			751.61		(5) 751.61		
Da Costa Professorship			3,550.60	3,550.60	3,550.60		
Darling (Edward A.)		239.20	43.87	283.07	53.50		229.57
Dean (Bashford)		299.31	205.00	504.31	250.00		254.31
Dean Lung Professorship		7,500.92	10,250.00	17,750.92	14,958.00		2,792.92
Deutscher Verein Prize		415.44	41.00	456.44			456.44
Deutsches Haus		298.41	732.79	1,031.20	1,026.24		4.96
De Witt (George G.)		186.62	631.40	818.02	770.00		48.02
Dibblee (Ezra Reed and Frances M.)		647.33	485.03	1,132.36	513.00		619.36
Ditson (Charles H.)			4,100.00	4,100.00	4,100.00		
Drisler Classical		1,417.68	471.50	1,889.18	74.01		1,815.17
Dunning (William A.)		183.99	1,783.50	1,967.49	742.99		1,224.50
Dwight		137.74	59.86	197.60			197.60
Dyckman		340.58	471.50	812.08	407.08		405.00
Earle Prize		223.04	54.32	277.36			277.36
Eaton Professorship			4,100.00	4,100.00	4,100.00		:
Edson (Herman Aldrich)			205.00	205.00	205.00		
Eimer (August O.) Medal		261.40	41.00	302.40	25.50		276.90
Einstein		2,783.70	205.00	2,988.70			2,988.70
Ellis (George Adams) Scholarship		641.36	328.00	969.36	00.009		369.36
Ellis (George W.)		3,363.19	3,075.00	6,438.19	3,200.00		3,238.19
Elsberg (Albert Marion)		11.04	94.10	105.14	95.00		10.14
Emmons (Samuel Franklin)		2,084.01	686.75	2,770.76	1,400.00		1,370.76
Eno (Amos F.)			328,435.78	328,435.78	328,435.78		
Evans Fellowship.		3,625.00	1,230.00	4,855.00	1,500.00		3,355.00
Evans (Henry) Scholarship			820.00	820.00	820.00		
Ewell (Ella Marie) Medal		85.42	41.00	126.42	20.00		76.42

323.59 69.25	371.11 2,069.57	291.20 K T 4.57 T T 154,37 O F	2,922.91 37.25	173.13 49.16 49.16 13.67 19.88.49 19.78 19.78 19.78 19.78 19.78	510.11 47.74 108.19
		06 188			103.94
615.11 835.00 155.00 (4) 21,231.30 2,050.00 23.02	. 4 . 8	81	ਜਂ :		7,275.00 410.00 7,911.92
615.11 1,158.59 224.25 21,231.30 2,050.00 23.02	~ 2, ~	301.40 410.00 4.57 2,154.37		n	7,275.00 510.11 457.74 108.19 7,807.98
615.11 410.00 123.00 21,231.30 2,050.00 23.00	31.17 410.00 676.50 820.00	51.25 410.00 2.66 2,070.50 98.40	286.67 286.67 286.67 41.00	594.50 41.00 4,879.00 6,091.90 410.00 271.19 37,310.00	6,150.00 143.91 464.10 108.19 3,588.69
748.59	46.62 411.11 1,393.07	250.15 1.91 83.87	218.94 2,533.41 51.25	173.13 30.54 2.864.76 763.49 47.11 138.82	1,125.00 366.20 364.20 4,219.29
					\$6.36
Faculty House Maintenance. Perguson (David W. and Ellen A.). Field (Otis W.). Fine Arts Endowment. Fire Insurant H.) Pirze.	Friends of the Library. Garibaldi (Guiseppe). Garth Memorial. Gebhard Professorship.	German Lecture Gibson (William Henry) Gifford (Ralph Waldo) Gilder (Richard Watson)	Goldschmid (Samuel Anthony) Gottsheil (Gustav) Gottsberger (Cornelius Heeney) Gould (Edwin J.). Green Prize.	Hall (George Henry)  Hamilton (John Church)  Harriman (Revernd Orlando)  Harris (Ellen C.).  Harrison (James Renwick) Scholarship  Haughton (Percy D.).	Heppurn (A. Barton) Frolessorship. Hervey (William Addison)

	Debit Balances June 30, 1938	Credit Balances June 30, 1938	Received 1938-1939	Total Credits	Expended 1938-1939	Debit Balances June 30, 1939	Credit Balances June 30,
Huber (Frederick W., Jr.) Scholarship.			\$205.00	\$205.00	\$205.00		
Illio Medal		\$239.83	94.30	334.13	105.00	:	\$229.13
Indo-Iranian			615.00	615.00	615.00		
Instituto de las Espanas Endowment		488.49	227.07	715.56			715.56
Instituto de las Espanas Permanent		36.24	4.31	40.55			40.55
Intercollegiate Chess League.			16.23	16.23	16.23		
Italian Societies Endowment			159.83	159.83 (6)	(6) 159.83		
Jackson (A. V. Williams) Fellowship.			391.29	391.29			391.29
James (D. Willis)			4,100.00	4,100.00	4,100.00		
Jefferson Statue Maintenance		1,208.40	73.80	1,282.20			1,282.20
Johnston (Edward W. S.)		34.15	82.00	116.15	46.39		92.69
Jones (Adam Leroy) Memorial Prize.			45.10	45.10	45.10		
Kellett (Euretta J.)		5,401.46	8,695.53	14,096.99	6,000.00		8,096.99
Kemp (James F.)			820.00	820.00	820.00		
Kemp (James Furman) Memorial		3,174.27	1,665.05	4,839.32	753.46		4.085.86
Kendall (Edward Hale)		2,562.27	1,527.24	4,089.51	902.00		3,184.51
Kennedy (John Stewart)			86,378.87	86,378.87	86,378.87		:
Killough (James H.) Scholarship		2,345.80	1,500.17	3,845.97	1,506.26	:	2,339.71
Killough (Walter H. D.) for Economics			1,000.00	1,000.00	1,000.00	:	
Killough (Walter H. D.) for English literature			1,000.00	1,000.00	1,000.00	: : : : : : : : : : : : : : : : : : : :	
Killough (Walter H. D.) for International Peace		2,425.40	2,210.04	4,635.44	4,450.00		185.44
Killough (Walter H. D.) for Scientific Research		5,880.84	1,105.01	6,985.85			6,985.85
Kunz (George F.)		50.74	61.50	112.24	29.88		82.36
Lahey Scholarship			205 00	205.00	205.00		
Lasher (John K.)			41.00	41.00	41.00		
Law Library.		1,159.91	215.25	1,375.16		:	1,375.16
Law Scholarship			1.64	1.64			1.64
Legislative Drafting Research		3,397.89	6,051.17	9,449.06	4,714.63		4,734.43

odge (Standwood Cockey), 518.57 3.928.23 3.928.22 3.928.23 3.928.2	libbey (Jonas M.)	\$.74		8,887.32	8,886.58	8,886.58			
518 57         209.68         728.25         151.32           1,804.48         4100.00         4,100.00         4,100.00           25.00         226.64         1,00.00         4,100.00           25.00         246.00         2705.00         205.00           26.00         205.00         205.00         205.00           38.90         123.00         161.90         205.00           38.06.35         3,079.70         268.605         2,607.11           200.00         230.66         1,125.45         1,125.45           410.00         1,125.45         1,125.45         1,000.00           530.66         730.66         9,764.68         2,677.00           6,579.68         1,025.00         7,604.68         2,687.10           200.00         530.66         7,604.68         2,687.50           213.89         1,025.00         7,604.68         2,687.50           287.00         287.00         287.00         287.00           287.00         287.00         287.00           287.00         287.00         287.00           287.00         287.00         287.00           288.00         28.30         28.30           288.0	Lodge (Standwood Cockey)		:	3,923.23	3,923.23	3,923.23	:		
1,804.48	oeb (James)		518.57	209.68	728.25	151.32		576.93	
4,100.00         4,100.00         4,100.00           1,366.66         1,400.00         3,006.66           25.00         205.00         205.00           25.00         205.00         205.00           88.39         123.00         161.30           109.72         2,050.00         265.33           200.00         2,159.72         1,000.00           200.00         2,159.72         1,000.00           101.125.45         1,125.45         1,125.45           101.125.45         1,66.46         2,067.11           200.00         530.66         1,604.68         2,067.11           200.00         1,125.45         1,125.45         1,125.45           3,664.45         3,664.45         3,664.45         3,664.45           3,664.45         3,664.45         3,664.45         3,664.45           410.00         287.00         287.00           287.00         287.00         287.00           213.89         43.05         25.56.94           41.00         41.00         41.00           10,988.00         10,791.99         10,088.98           262.50         262.50         263.00           262.50         2,060.00	oubat		1,804.48	492.00	2,296.48			2,296.48	
1,366.66         1,640.00         3,006.66         240.00           25.00         226.00         205.00         205.00           38.90         123.00         269.34         205.00           64.34         205.00         269.34         205.00           109.72         2,050.00         2,150.00           200.00         2,050.00         2,155.00           3.806.35         3,079.70         6,886.05         2,607.11           109.72         2,050.00         2,155.46         1,125.45           1,125.45         1,125.46         1,125.45         1,125.45           6,579.68         1,125.45         1,125.45         1,125.45           1,125.45         1,125.46         1,125.45         1,100.00           2,287.00         2,87.00         2,87.00         2,87.00           2,87.00         2,87.00         2,87.00         2,87.00           2,87.00         2,87.00         2,87.00         2,87.00           2,87.00         2,87.00         2,87.00         2,87.00           2,87.00         2,87.00         2,87.00         2,87.00           2,87.00         2,87.00         2,87.00         2,87.00           2,87.00         2,87.00	Professorship	:		4,100.00	4,100.00	4,100.00			
25.00         246.00         271.00         240.00           38.90         123.00         205.00         205.00           38.91         123.00         269.34         205.00           109.72         2,050.00         2,159.72         1,000.00           3.806.35         3,079.70         2,159.72         1,000.00           11.25.45         1,125.46         1,125.45         1,125.45           11.25.50         7,604.68         2,087.50         2,087.50           287.00         287.00         287.00         287.00           287.00         287.00         287.00         287.00           287.00         287.00         287.00         287.00           287.00         287.00         287.00         287.00           287.00         287.00         287.00         287.00           287.00         287.00         287.00         287.00           287.00         287.00         287.00         287.00           288.00         10,791.99         10.088.98           28.241         82.41         82.41           28.241         82.41         1,000.00           28.2526         2,050.00         2,050.00           28.253.04 <td>Fellowship</td> <td></td> <td>1,366.66</td> <td>1,640.00</td> <td>3,006.66</td> <td></td> <td></td> <td>3,006.66</td> <td></td>	Fellowship		1,366.66	1,640.00	3,006.66			3,006.66	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	MacMahon (Katherine)		25.00	246.00	271.00	240.00		31.00	Б
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Francaise	:		205.00	205.00	205.00		:	ŀ
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Manners (Edwin)	:	38.90	123.00	161.90			161.90	P
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	g (Alfred E.) Scholarship		64.34	205.00	269.34	205.00		64.34	0
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Mason (William)			410.00	410.00	410.00		:	R
3,806,35         3,7079.70         6,886.05         2,607.11         4.           200,00         530.66         730.66         9,730.66         730.66         750.66           0,125.04         1,125.45         1,125.45         1,125.45         5.         5.           1,025.0         7,604.68         2,037.50         5.         5.           1,025.0         7,604.68         2,037.50         5.           1,025.0         287.00         287.00         287.00           2,037.00         287.00         287.00         41.00           41.00         41.00         41.00         41.00           43.05         256.94         65.55         65.55           65.60         65.55         65.55         65.55           196.01         1,098.00         10,791.99         10,080.00           2,025.0         410.0         672.50         825.00           2,037.0         84.15         82.00           2,038.0         1,056.25         1,006.00           2,038.0         2,050.00         2,050.00           2,038.6         3,321.4         1,100.00           2,038.6         3,321.4         1,100.00           2,039.0 <t< td=""><td>Mathews Lectureship</td><td>-</td><td>109.72</td><td>2,050.00</td><td>2,159.72</td><td>1,000.00</td><td></td><td>1,159.72</td><td>т:</td></t<>	Mathews Lectureship	-	109.72	2,050.00	2,159.72	1,000.00		1,159.72	т:
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Matthews (James Brander)		3,806.35	3,079.70	6,886.05	2,607.11		4,278.94	
6,579,68         1,125.46         1,125.46         1,125.45         5,579           6,579,68         1,025.00         7,604.68         2,037.50         5,544.5         5,544.5           4,00.00         287.00 <td< td=""><td>(Ralph Edward)</td><td></td><td>200.00</td><td>530.66</td><td>730.66</td><td></td><td>:</td><td></td><td>О</td></td<>	(Ralph Edward)		200.00	530.66	730.66		:		О
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	McClymonds Scholarship		.01	1,125.45	1,125.46	1,125.45		.01	F
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	McKim Fellowship		6,579.68	1,025.00	7,604.68	2,087.50		5,517.18	7
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Mead (William Rutherford)			3,664.45	3,664.45	••	:		r I
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Megrue (Roi Cooper)			410.00	410.00			:	1
287.00     287.00     287.00       213.89     43.05     287.00     41.00       65.60     65.55     65.55     65.55       196.01     10,988.00     10,791.99     10,088.98       1,402.78     1,402.78     1,402.09       2262.50     41.00     84.15     82.50       82.11     82.41     82.41       82.41     82.41     82.41       2,023.64     2,050.00     2,050.00       2,531.25     1,055.00     3,556.23       2,531.25     1,055.00     3,556.23       2,551.26     2,550.00     3,556.23       3,556.20     3,556.20       2,531.25     1,055.00     2,050.00       2,551.26     2,550.00       2,551.26     2,550.00       2,551.26     2,550.00       2,550.00     3,556.25       3,556.20       2,550.00     3,556.20       3,556.20     3,556.20       3,556.20     3,556.20       3,556.20     3,556.20       3,556.20     3,556.20       3,556.20     3,556.20       3,556.20     3,556.20       3,556.20     3,556.20       3,556.20     3,556.20       3,556.20     3,556.20       3,556.20 <td< td=""><td>e (Roi Cooper) Scholarship</td><td>-</td><td></td><td>287.00</td><td>287.00</td><td>287.00</td><td></td><td></td><td>E</td></td<>	e (Roi Cooper) Scholarship	-		287.00	287.00	287.00			E
196.01   213.89   41.00   41	Megrue (Stella Cooper) Scholarship			287.00	287.00	287.00		:	т
213.89         43.05         256.94         65.55           .05         .05         .05         .05.55           .06         .065.60         .05.55         .065.55           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00         .00         .00           .00         .00	Megrue (Stella Cooper) for Basketball			41.00	41.00	41.00		:	B
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Member of Class of 1885		213.89	43.05	256.94			256.94	ŀ
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Mergentime (James Henry)	-0.5	:	65.60	65.55	65.58			i A
196.01   10,988.00   10,791.99   10,088.98   1,402.78   1,400.00   1,402.78   1,400.00   1,402.78   1,000.00	Michaelis (Dr. Alfred Mortiz) Prize	-	:	41.00	41.00	41.00			S
1,402.78     1,402.78     1,402.78     1,000.00       22.50     410.00     672.50     525.00       2.15     82.00     84.15     82.00       82.41     82.41     82.41       82.41     82.41     82.41       82.41     82.41     82.41       82.41     82.41     82.41       82.41     82.41     82.41       82.41     82.41     82.41       82.41     82.41     82.41       82.61     2.050.00     2.050.00       2.023.64     3.050.00     3.56.50       2.531.25     205.00     205.00	diller (Nathan J.)	. 196.01		10,988.00	10,791.99	10,088.98		703.01	U
262.50     410.00     672.50     525.00       2.15     82.00     84.15     82.00       82.41     82.41     82.41       82.41     82.41     82.41       82.41     82.41     82.41       82.00     2.050.00     2.050.00       2.050.00     2.050.00     2.050.00       2.531.25     1.025.00     3.556.25       2.531.25     1.025.00     3.556.25       2.551.25     2.050.00     2.050.00	Aitchel (John Purroy) Memorial			1,402.78	1,402.78	1,000.00		402.78	R
2.15     82.00     84.15     82.00       82.41     82.41     82.41       82.41     82.41     82.41       82.41     82.41     82.41       82.41     82.41     82.41       82.41     82.41     82.41       2,620.00     2,650.00     2,050.00       2,531.24     1,025.00     2,531.14     1,100.00       2,631.25     1,025.00     2,05.00     2,05.00     2,05.00	ll (William)		262.50	410.00	672.50	525.00		147.50	E
82.41 82.41	Moffat Scholarship		2.15	82.00	84.15	82.00		2.15	R
543.75     512.50     1,056.25     120.50       2,023.64     2,050.00     2,050.00     2,060.00       2,531.25     1,025.00     3,556.25     3.82       2,531.25     205.00     2,050.00     3,556.25	omery (Robert H.) Prize			82.41	82.41	82.41	:		
2,050.00     2,050.00     2,050.00       2,023.64     307.50     2,331.14     1,100.00       2,531.25     1,025.00     3,556.25     3.82       2,551.25     205.00     205.00	(Augustus Newbold)		543.75	512.50	1,056.25	120.50		935.75	
2,023.64     307.50     2,331.14     1,100.00       2,531.25     1,025.00     3,556.25     3.82       205.00     205.00     205.00	Morrow (Dwight W.)			2,050.00	2,050.00	2,050.00			
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Mosenthal Fellowship		2,023.64	307.50	2,331.14	1,100.00		1,231.14	
	/ (George W.)	:	2,531.25	1,025.00	3,556.25	3.85		3,552.43	
	Murtha (Thomas F.) Scholarship	····-		205.00	205.00	205.00			(

	Debit Balances June 30, 1938	Credit Balances June 30, 1938	Received 1938-1939	Total Credits	Expended 1938-1939	Debit Balances June 30,	Credit Balances June 30,
Niven (Robert Johnston)		\$5,866.67	\$8,200.00	\$14,066.67	\$13,875.00		\$191.67
Ochs (Adolph S.)		1,343.75	1,025.00	2,368.75	1,096.91		1,271.84
Openhym		11,639.83	4,840.59	16,480.42	1,013.60		15,466.82
Ordronaux (John)			125.05	125.05	125.05	:	
Parker			1,200.00	1,200.00 (10)	(10) 1,200.00		
Paterno Library Endowment		333.20	1,230.00	1,563.20	605.42	:	957.78
Peele (Robert)			107.59	107.59 (11)	(11) 107.59		
Pell (Mary B.)			30,189.63	30,189.63	30,189.63		
Perkins (Edward H.,Jr.) Scholarship	:	683.34	615.00	1,298.34	750.00		548.34
Perkins Fellowship		293.93	233.70	527.63	:		527.63
Peters (William Richmond, Jr.)		482.55	2,726.50	3,209.05	3,011.63		197.42
Phillips (Harriet S.) for Barnard College		650.00	4,703.10	5,353.10	4,703.10		650.00
Phillips (Harriet S.) for School of Journalism		.28	820.00	820.28	810.00		10.28
Phillipson (Brainerd F.) Scholarship		211.31	513.07	724.38	531.78		192.60
Philolexian Centennial Washington Prize		560.12	41.00	601.12	173.00	:	428.12
Philolexian Prize		08.09	61.50	121.80	70.00	:	51.80
Phoenix		14,461.08	37,440.61	51,901.69	44,905.25		6,996.44
Plummer (Mary Wright) Scholarship		414.17	531.00	945.17		:	945.17
Porter			1,195.49	1,195.49 (12)	(12) 1,195.49		
Prentice		:	205.00	205.00	205.00		
President's House Furnishing and Equipment	\$238.32		799.50	561.18	299.45		261.73
Proudfit (Alexander Moncrief)		1,265.00	615.00	1,880.00	1,275.00		605.00
Psychology			4,100.00	4,100.00	4,125.00	\$25.00	
Pulitzer (Joseph) for School of Journalism		315.48	53,301.53	53,617.01	53,253.75		363.26
Pulitzer Prize		15,723.26	22,550.00	38,273,26	23,681.83		14,591.43
Pulitzer Scholarship		1,351.55	12,710.00	14,061.55	11,215.41		2,846,14
Raymond for University Medical Office			77.87	77.87			77.87
Raymond for Religious and Social Work		ſ	38.94	38.94			38.94

	Debit Balances June 30, 1938	Credit Balances June 30, 1938	Received 1938-1939	Total Credits	Expended 1938-1939	Debit Balances June 30, 1939	Credit Balances June 30, 1939
Thompson (William B.)		\$5,567.65	\$4,169.61	\$9,737.26	\$1,438.90		\$8,298.36
Todd (Henry Alfred) Prize		164.80	207.73	372.53	150.00		222.53
Toppan Prize		485.25	172.20	657.45	210.00		447.45
Trowbridge Fellowship.		1,033.89	553.50	1,587.39	600.00		987.39
Turner (Charles W.).		180.54	253.46	434.00	262.73		171.27
Tyndall Fellowship		4,027.14	471.50	4,498.64	972.00		3,526.64
University Publication		152.62	16.48	169.10			169.10
Van Am Prize		544.44	266.50	810.94	303.00		507.94
Van Amringe Mathematical		232.19	209.10	441.29	265.00		176.29
Van Amringe Memorial		205.04	20.50	225.54			225.54
Van Buren Mathematical			225.50	225.50	225.50		
Van Cortlandt (Robert B.)			33,415.00	33,415 00	33,415.00		
Vanderpoel		310.83	1,025.00	1,335.83	665.00		670.83
Van Praag (L. A.)		1,947.53	328.00	2,275.53			2,275.53
Van Rensselaer (Mariana Griswold)		10.90	41.00	111.90	20.00		61.90
Van Sinderen (Howard)		212.50	410.00	622.50	475.00		147.50
Van Valkenburgh		35.57	36.65	72.22			72.22
Waring			4,100.00	4,100.00	4,100.00		
Watson		435.00	363.00	798.00			798.00
Wendell Medal		6.12	28.88	35.00	35.00		
Wheeler (H. A.) Scholarship			246.00	246.00	246.00		
Wheeler (John Visscher) Scholarship			492.00	492.00	492.00		
Wiggin (Albert H.)		1,237.50	563.75	1,801.25	1,801.25		
Wilson (Edmund B.)		846.11	410.00	1,256.11	583.44	: : : : : : : : : : : : : : : : : : : :	672.67
Wolffram (Charles Berthold)		132.28	205.00	337.28	14.60		322.68
Woodberry Prize		68.00	65.60	133.60	133.60	:	
Wright (Henry) Memorial			17.47	17.47		:	17.47
Special Investments Account Unassigned Income		97,163.21 (A)	(A) 75,943.69	21,219.52	5,600.00		15,619.52

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	249.25	1,708.80	1,537.23	R	:	1'	5,203.00	:	359.62	552.73	1,585.47	6.18	620.64	:	3,699.02	6,763.42	136.50	10.00	. P.	. A		913.12	10.16	9,011.29	1.500.00	1,059.90	176.76	508.26		2,003.25		267.50
					:														\$2.96												3.47	:
	7,950.75		1,300.00		1,890.56	4,100.00	135.77	(17) 395.17	00.009				10.00	8,232.83 (18) 8,232.83	23	6,935.00	200.00	4		738.00	(19) 1227.53.		92.34	105,879.69	23,100.00	800.00	100.00		2,368.29			200.00
	8,200.00	3,387.82 (16)	2,837.23		1,890.56	4,100.00	5,338.77	395.17 (17)	929.63	552.73	1,585.47	6.18	690.64	8,232.83	240,909.70	13,698.42	336.50	410.00	82.04	738.00	1,227.53 (19)	913.12	102.50	114,890.98	24,600.00	1,859.90	276.76	508.26	2,368.29	2,		467.50
	8,200.00	1,758.04	1,322.25		1,890.56	4,100.00	779.00	395.17	625.25	152.40	277.36	2.74	46.13	8,232.83	228,234.25	7,125.80	266.50	410.00	82.00	738.00	1,227.53	756.34	102.50	108,340.60	24,600.00	1,287.40	246.00	41.00	2,368.29	1,004.50	205.00	205.00
	1 882 98	1,629.78	1,514.98				4,559.77		334.37	400.33	1,308.11	3.44	644.51		12,675.45	6,572.62	70.00		.04	:		156.78		6,550.38		572.50	30.76	467.26		1,898.75		262.50
MEDICAL SCHOOL	Anonymous for Department of Practice of Medicine	Blumenthal (George, Jr.)	Bull (William T.)	Carnegie Corporation for Graduate Medical Instruc-	tion and Research	Carpentier (R. S.)	Carter (Herbert S.)	Cartwright Lectureship	Clark Scholarship	Class of 1899 Scholarship	Class of 1912.	Class of 1933	Cock (Thomas F., M. D.)	Delafield Professorship	De Lamar (Joseph R.)	Dennet (Horace)	Devendorf (David M.)	Doughty (Francis, M. D.).	Draper Library	DuBois (Dr. Abram)	Gies (William J.)	Griffiths (William E.)	Grosvenor (Robert) Memorial	Harkness Funds	Harkness (Edward S.) for Surgery	Harsen Scholarship	Hartley (Frank)	Hays (Walter) Memorial	Hemingway Scholarship.	Holt (L. Emmett)	Huber (Joseph and Christina)	Huber (Francis) Scholarship

\$1,631,376.05

	Debit	Credit				Debit	Credit
	Balances	Balances	Received	Total	Expended	Balances	Balances
	June 30,	June 30,	1938-1939	Credits	1938-1939	June 30,	June 30,
	1938	1938				1939	1939
Huber (Viola B.) Scholarship.		\$87.50	\$205.00	\$292.50	\$212.50		\$80.00
Jacobi (Abraham) Library		50.59	206.03	256.62	206.03		50.59
Jacobi (Abraham) Scholarship		150.00	820.00	970.00	650.00		320.00
James (Walter Belknap)		2,000.18	2,050.00	4,050.18	2,500.00		1,550.18
Janeway (E. G.)		:	1,096.75	1,096.75	1,107.03	\$10.28	
Janeway Prize			41.00	41.00	41.00		
Koplik		2,968.75	615.00	3,583,75			3,583.75
Lee.		298.68	1,230.00	1,528.68	1,528.68		
Markoe (Francis Hartman)		178.33	410.00	588.33	375.00		213.33
McAneny (Marjorie)		212.50	205.00	417.50	212.50		205.00
Medical School Equipment Fund		103.28	505.94	609.22	189.00		420.22
Meierhof (Dr. Harold Lee)		42.50	41.00	83.50			83.50
Miller (Guy B.)			410.00	410.00	410.00		
Ottmann (Madeleine L.)		354.05	2,050.00	2,404.05	2,185.52		218.53
Pierre (Charles and Lillian)	:	361.79	410.00	774.79	500.00		274.79
Proudfit (Maria McLean)		1,528.02	615.00	2,143.02	1,200.00		943.02
Robinson (Meyer R.)		29.22	20.50	49.72			49.72
Simon			352.60	352.60	352.60		
Smith Prize		1,166.13	213.20	1,379.33			1,379.33
Stevens Prize		2,300.62		2,378.52			2,378.52
Swift Memorial.		1,545.48		1,875.53	401.90		1,473.63
Tucker (Ervin Alden)		3,193.60	¢1	5,243.60			5.243.60
Watson (Dr. William Perry)		:	213.20	213.20	213.20		
Weinstein (Alexander)		:	32.80	32.80	34.00	1.20	
Wheelock (George G.)			209.10	209.10	216.75	7.65	
	\$2,916.58		\$510,656.82 \$1,611,836.45 \$2,119,576.69 \$1,675,192.35	\$2,119,576.69	\$1,675,192.35	\$635.95	\$445,020.29
			Less Transfers		43,816.30		

### INCOME OF SPECIAL ENDOWMENTS-NOTES

### TRANSFERS

(1)	To Barnard Medal Gift	\$60.00
(2)	To Barnard Library Fund	666.25
(3)	Refund to Trustee	960.33
(4)	To Principal Fine Arts Endowment Fund	21,231.30
(5)	To Principal W. Bayard Cutting Jr. Fellowship Fund	151.61
(6)	To Principal Italian Societies Endowment Fund	159.83
(7)	To Megrue Loan Fund	410.00
(S)	To Principal William Rutherford Mead Endowment Fund	664.45
(9)	To Principal Ralph Edward Mayer Fund	282.31
(10)		1,200.00
(11)	To Principal Robert Peele Prize Fund	107.59
(12)	To Porter Loan Fund	1,195.49
(13)	To Principal Anonymous Fund for Physics and Physical Chemistry	6,487.28
(14)	To Principal F. B. F. Rhodes Scholarship Fund	75.28
(15)	To Shoemaker Loan Fund	205.00
(16)	To Blumenthal Loan Fund	879.02
(17)	To Principal Cartwright Lectureship Fund	395.17
(18)		8,232.83
(19)	To Principal William J. Gies Fellowship Fund	452.56

\$43,816.30

(A) Excess of distribution to various funds, over receipts.

GIFTS AND RECEIPTS FOR DESIGNATED PURPOSES, RECEIPTS AND DISBURSEMENTS FOR THE YEAR ENDED JUNE 30, 1939

	Debit	Credit				Debit	Credit
	Balances	Balances	Received	Total	Expended	Balances	Balances
	Inne 30	June 30	1938-1939	Credits	1938-1939	June 30.	June 30.
	1938	1938				1939	1939
13:0			00 206	00 200			00 300
Aecounting Department Gift			94.0.00	460.00	:		90.00
Aecountancy Publicity Gift	:	\$562.39		562.39	\$332.43		229.96
Allen Gift for Special Purposes		2,000.00		2,000.00			2,000.00
Allen Scholarship Gift		45.20		45.20	45.20		
Alumni Club of Puerto Rico Gift		100.00		100.00			100.00
Alumni of the College of Physicians and Surgeons							
Gift for the Huntington Memorial Library		1,637.94	67.15	1,705.09			1,705.09
Alumni Federation of Columbia University Gift	\$4,297.14		7,112.96	2,815.82	9,764.12	\$6,918.30	
American Cigarette and Cigar Co. Gift			2,400.00	2,400.00	2,400.00		
American Council on Education			20.00	20.00	20.00		
American Council of Learned Societies Gift for Cat-		-					
aloguing of Chinese and Japanese Collections	:		5,000.00	5,000.00	3,288.58		1,711.42
American Council of Learned Societies Gift for Stu-							
dent Aid			200.00	200.00	200.00		
American Council of Learned Societies Gift for the							
Study of Folk Musie		250.00	:	250.00	250.00		
American Council of Learned Societies Fellowship							
Gift		: : : : : : : : : : : : : : : : : : : :	3,000.00	3,000.00	3,000.00	:	
American Institute of Baking Gift for Research in							
Chemistry	:		1,500.00	1,500.00	:		1,500.00
American Jewish Committee Gift for Research in				6	3 0 0		0
History		383.39		383.39	133.35		250.04
American Journal of Cancer Gift			1,000.00	1,000.00			1,000.00
American Library Association Gift for School of Li-					6		
brary Service			1,600.00	1,600.00	1,600.00		
			_		_		

	RE	PORT	O F	TF	ΙE	TR	EAS	URE	R		7
776.75		103.14 225.00 25.00	1,444.40	19,638.74	68.48 25.00	52,050.00 19.14 10.00	213.37	3,990.46	:	166.35	
1,000.00	1,2	396.86	369.02	16,020.05	872.85 300.00			50.00	141.14	1,340.37	50.00
1,000.00	1,200.00	500.00 225.00 25.00	369.02	35,658.79 142.48	941.33 325.00	52,050.00 19.14	213.37	91.07 $3,990.46$ $50.00$	141.14	1,506.72	20.00
	1,200.00		369.02	21,082.34	941.33	54		157.16	:	1,000.00	50.00
776.75		500.00 225.00 25.00	1,387.52	14,576.45 142.48		50,000.00 19.14	213.37	91.07 3,833.30 50.00	141.14	506.72	
									:		
American Library Association Fellowship and Scholarship Gift.  American Manufacturers of Toilet Articles Gift for Chemical Research  American Metal Company Gift for Research on Correction Petal Company Gift for Research on Correction Problems	American Philosophical Society Gift for a Punched Card Catalogue.	American Thiosophican Society One, for Assessment on American Society of Givil Engineers Gift for Research American Type Founders Library Gift	Anonymous Gift for Advanced Humanistic Work Anonymous Gift for American School of Indie and Iranian Studies	Anonymous Cancer Research Gift No. 1 Anonymous Cancer Research Gift No. 3	Anonymous Gift for Hartley Hall Anonymous Gift for Cellulose and Paper Research	::8	Anonymous Gift for Geology Assistance.  Anonymous Gift for Loud Speaker for the McMillin	Theatre.  Anonymous Gift for New Boat House at Baker Field.  Anonymous Gift for Prizes in the Auditing Laboratory	Anonymous Gift for Purchase and Preservation of Books for the Library	Anonymous Gift for Research in Department of Chemical Engineering.	Anonymous Cutrior Departmental Appropriation— Philosophy

1	COLUMBIA UNIVERSITI
Credit Balances June 30,	\$300.00 \$300.00 165.38 85.00 351.29 918.94 918.94 50.00 1,013.14 522.52 133.07 190.00
Debit Balances June 30, 1939	
Expended 1938-1939	\$1,800.00 200.00 200.00 1,000.00 85.00 85.00 2,490.00 2,490.00 2,389.38 6,803.04
Total Credits	\$1,800.00 300.00 300.00 26,729.33 165,38 85.00 1,004.83 1,004.83 1,013.14 421.80 52,252 2,490.00 2,389.38
Received 1938-1939	\$1,800.00 300.00 200.00 2,081.91 6,51 85.00 1,000.00 85.00 85.00 69.99 1,000 00 1,000 00 9,000.00
Credit Balances June 30, 1938	\$.50 24,647.42 158.87 1,064.83 1,064.83 612.98 217.75 130.00 1,389.38
Debit Balances June 30, 1938	
	Anonymous Gift for Salaries—Department of Philosophy.  Anonymous Gift for Salaries—Department of Physics Anonymous Gift for Scholarships in Columbia College and in the Graduate School.  Anonymous Gift for Special Purpose. Anonymous Gift for Special Purpose. Anonymous Gift for Support of the Columbia University Statistical Bureau. Anonymous Gift for Planting on the Campus. Amstrong Gift for Laboratory Changes in the Department of Electrical Engineering.  Armstrong Gift for Laboratory Changes in the Department of Electrical Engineering.  Association of Lacedaemonians Gift for the Purchase of Modern Greek Books.  Association of the Alumni of the School of Dental and Oral Surgery Gift for Research in Metallurgy.  Astronomical Hollerith Computing Bureau.  Auchincless Gift for Research in Organic Chemistry. Band Account—Department of Music.  Barnard College Residence Halls Service Gift.  Barnard Medal.  Barnard College Gift for Undergraduate Music Fund Barnard Medal.  Barnard Medal.  Barnard Medal.  Barnard Medal.  Barnard Medal.  Barnard Gollege Offict or General Purposes

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1,942.15	200.00	100.82 9,528.78	400.00	449.11 307.63	320.26		4,500.00	1,550.00						5,080.02
											\$1,286.77			•
1,871.53	500.00	476.46	100.00	1,857.50	179.74	977.00	450.00		(1) 6,676 41	1,525.00	221.17	1,000.00	10,000.00	3,907.19
3,813.68	1,000.00	577.28 11,000.00	100.00	2,306.61	500.00	977.00	4,950.00	1,550.00	6,676.41 (1)	1,525.00	221.17 1,563.23	1,000.00	10,000.00	8,987.21
. 66	500.00	575 95 11,000.00		80.00	500.00	:	4,500 00	1,550.00	2,000.00	1,437.50	1,550.00	1,000.00	10,000.00	6,000,00
3,813.68	500.00	1.33	100.00	2,306.61		977.00	450.00		4,676.41	87.50	221.17			2,987.21
Benjamin Gift for the Park Benjamin Collection of Books	tension	Cabot (Maria Moors) Prize Gift	Campbell Gift for Metallographic Laboratory	Carnegie Corporation Gift for Chemical Study of Rudimentary Organisms	Carnegie Corporation Gift for Preparation of a Sub- iect Index	Carnegie Corporation Gift for the Publication of the International Journal of American Linguistics	Carnegie Corporation Gift for Kesearch in Department of Anthropology	Carnegie Corporation Gift for Research in Department of Economics	Carnegie Corporation Gift for Research in Social	Carnegie Corporation Gift for Scholarships for Museum Workers and Art Teachers	Carnegie Corporation Gift for School of Library Service	Carnegic Corporation Gift for Studies in Land Economics.	Carnegie Corporation Gift for Study of Young Workers in a Metropolitan Area	Carnegie Corporation Gift for Work in Town Plan-

	Debit Balances June 30, 1938	Credit Balances June 30, 1938	Received 1938-1939	Total Credits	Expended 1938-1939	Debit Balances June 30, 1939	Credit Balances June 30, 1939
Carnegie Corporation Gift for Work in Reproducing the Diary of George Templeton Strong			00 009\$	00 009\$			00 0000
Casa Italiana Book Account.		\$391.21	5.00	396.21			396.21
Casa Italiana Bulletin			46.27	46.27			46.27
Casa Italiana Educational Bureau Gift	\$67.21		25.00 DR		\$1.02	\$43.23	
Casa Italiana Scholarship Gift		699.23	:	699.23			699.23
Casa Italiana Special Account.		874.65	75.10	949.75			949.75
Chandler Museum Maintenance Fund		9.44		9.44			9.44
Chapel Collection Gift		457.31	100.00	557.31	144.16		413.15
Chapel Organ Gift	:	1,050.25		1,050.25			1,050.25
Check Guarantee Gift.		504.25	3.50	507.75		:	507.75
Chemical Foundation Gift for Research in Biologi-							
cal Chemistry		510.54	400.00	910.54	144.70	:	765.84
Chemical Foundation Gift for Research in Chemi-							
Chemical Banadatics Citt for December 1		621.31		621.31 (2)	(2) 621.31		
Water Voundation Gilt for Nesearch in Heavy		10.0		1	t d		
Chemical Foundation Gift for Isotone Besearch	830 03	10.161	500 00	. •	16.181	60 066	
Chemical Foundation Gift for Research in the Field			2000			20.00	
of Solvents Pertaining to the Oil Industry.	263.57	:	3,021.31	2,757.74	2,752.66		5.08
Circolo Italiano of Columbia College Gift for Student Aid			20 00	20 00			20 00
Class of 1882 Gift for Decoration of New Rooms for				00:00	:		00.00
Columbiana	:	1,500.00		1,500.00	857.40	:	642.60
Class of 1891 Scholarship Gift.		1,000.00		1,000.00		:	1,000.00
Class of 1898 Mines Gift for General Purposes			319.84	319.84		:	319.84
Class of 1903 College and Engineering Gift			300.00	300.00	300.00		200.00

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					182.66	17.00				20.00		596.16		180.00	135.00		150.00										1,057.60	18.74	231.92	32.38		
																								1,800.00	0000	1,880.00						
9.00	180.00	400.00	541.00		67.34			180.00				180.00		180.00	120.00					(3) 8,664.51		5.00		1,800.00		1,880.00	200.00	4.	27	10.25		6,681.78
9.00	180.00	400.00	541.00		250.00	17.00		180.00		20.00		776.16		360.00	255.00		150.00			8,664.51 (3)		5.00					1,557.60	4,	517.00	42.63		6,681.78
	180.00	400.00	495.00			17.00		180.00		20.00		23.48		540.00										1,800.00			500.00	4	200.00			5,000.00
9.00			46.00		250.00							752.68			255.00		150.00			8,664.51		5.00					1,057.60	53.24	17.00	42.63		1,681.78
														180.00						:				1,800.00								
Class of 1904 Gift for Flagpole at Baker Field	Student	Class of 1909 Scholarship Gift	Class of 1910 Gift for the 1910 Scholarship.	Class of 1912 College, Engineering and Architecture,	Gift for Equipment of the Rifle Team	Class of 1914 College and Engineering Gift	Class of 1915 Gift for Rental of a Room in the Res-	idence Halls	Class of 1917 College and Journalism 25th Anniver-	sary Gift	Class of 1917 Engineering Gift for Rental of a Dorm-	itory Room	Class of 1924 Gift for Rental of a Scholarship Room	in Hartlev Hall.	Class of 1925 Scholarship Gift.	Class of 1936 Gift for Student Faculty Refugee Schol-	arship	Cochran (Alexander Smith) Gift for Research and	Publication in the Department of Indo-Iranian	Languages	College Club of Cincinnati Gift for Aid of Needy	Students	College of Pharmacy Gift for Salaries in Department	of English	College of Pharmacy Gift for Salaries in Department	of Physics	Columbia College Scholarship Gift	Columbia University Club Scholarship Gift	Columbiana Gift.	Committee of Fifty Fund for Purchase of Books	Commonwealth Fund Gift for Research in Legal	History

	Debit Balances June 30, 1938	Credit Balances June 30, 1938	Received 1938-1939	Total Credits	Expended 1938-1939	Debit Balances June 30, 1939	Credit Balances June 30, 1939
Commonwealth Fund Gift for Study of Administrative Boards and Commissions		\$1,555.15	\$7.500.00	\$9,055.15	\$9,008.52		\$46.63
Commonwealth Fund Gift for Study of Control of Business in Medieval and Tudor England			3,750.00	3,750.00	3,605.57		144.43
Contemporary Civilization Gift		25.00		25.00			25.00
in Italian		150.00	75.00	225.00	150.00		75.00
Crocker Fund—Special Contributions Gift	:		302.40	302.40	302.40		
Crosby Gift for Dramatic Museum		1,882.53	77.18	1,959.71			1,959.71
Currier (A. F.) Special Account		210 33	:	210.33			210.33
Cushman Gift for Student Aid			1,200.00	1,200.00	1,200.00		
Cutting Gift in Commemoration of 175th Anniversary		522.36	302.20	824.56			824.56
Czecho-Slovak Government Gift		97.00		97.00			97.00
Davis Gift for Camp Columbia	:		20.00	20.00			50.00
Dean's Fund for Relief of Students in Columbia Col-							
lege		2,448.96	1,073.32	3,522.28			3,522.28
Deutsches Haus Gift	\$189.60		1,883.00	1,693.40	1,006.99		686.41
Dickinson (Harold T.) Gift for Assistance of an Un-							
dergraduate in Mining Engineering Course		100.00	:	100.00	:		100.00
Dodge (M. Hartley) Gift for Hartley Hall Dormitory		4.83		4.83 (4)	(4) 4.83		
Dodge (M. Hartley) Gift for a Model Room in Hart-							
ley Hall		109.30		109.30 (5)	(5) 109.30		
Dodge (M. Hartley) Gift for Repairs to Rooms in							
Hartley Hall	:	77.20		77.20 (6)	(6) 77.20		
Donaldson Gift for Planting at Nevis			20.00	20.00			50.00
Douglas Gift for Furnishings and Fittings for the							
Manor House,		1,000.00		1,000.00	:	:	1,000.00
DuPont Fellowship Gift			750.00	750.00	750.00		

	REPO	RT OI	<b>ТНЕ</b>	TREA	SURER		
114.00 1.00 1,723.99 91.18 36.39	10 874 01	13,574.01 142.06 700.00	1,491.98 1,957.50 625.00	226.32	9.50	4,460.34	
							\$1,010.10
600.00	2,000.00	240.01 1,600.00	3,508.02	(8) 99.42	105.60	875.00	1,158 24,
714.00 1.00 2,090.71 91.18 36.39 100.00	2,000.00	382.07 2,300.00	5,000.00 1,957.50 4,720.00	99.42 (8) 226.32 504.84	115.10 100.00 255.00 100.00	875.00	148.14
657.00 1,375.00 5.65 11.25	2,000.00	2,310.00 2,300.00	5,000.00	293.53	100 00		2,000.00
57.00 1.00 715.71 85.53 25.14	84.50	202.07	1,957.50	99.42	115.10	875.00	
				67.21			1,851.86
	Emergency Committee in Aid of Displaced German Scholars Gift for Salaries in the Law School Emergency Student Aid Gift	Epstean Gift for the Development of the Epstean Collection on Photography  Faculty Fellowship Gift  Plocal of the Commission Gift for December 19 the	Form Variational Aspects of Citrus Fruits.  French Government Gilt for French Activities.  Fuller (Anna) Fund Gilt for Institute of Cancer Research.	General Education Board Gift for Apparatus—Department of Psychology.  Geology Grinding Laboratory Account.  Glee Club Account—Department of Music.	Gouge Turn of the National Academy of Sciences Gift—Department of Astronomy  Government of Lithuania Gift for Traveling Expense. Graduate Schools—Social Room Gift.  Gradu Gift for University Macical Office	Harkness (Edward S) Gift for Construction and Equipment of South Hall	Hartley Corporation Gift for the Support of the Marcellus Hartley Laboratory

	Debit Balances June 30, 1938	Credit Balances June 30, 1938	Received 1938-1939	Total Credits	Expended 1938-1939	Debit Balances June 30, 1939	Credit Balances June 30, 1939
Hitchcock (Gilbert M.) Scholarship Gift—School of Journalism  Hopkins Gift for Medal in Commemoration of Prof-			\$1,000.00	\$1,000.00	\$1,000.00		
essor Frank Dempster Sherman. Hopkins (Mary D.) Gift for Student Aid in University Extension		\$684.50	100.00	100 00	265.00		\$100.00
Hundington Fortrait Gift Institute of French Studies Gift for Department of Romance Languages		140.75	2,040.85	145.75			145.75 2,040.85
Institute of Roumanian Culture Gift Instituto de las Espanas—General Account.		972.60	39.87	1,012.47			1,012.47
Instituto de las Espanas—Sephardic Studies Gift Instituto de las Espanas—Spanish Government Gift		704.49		704.49	1 260 99		527.49
Instituto de las Espanas—Special Lecture Gift Italian Inter-University Bureau—Casa Italiana Indeen (Mrs. A. V. Williams) Cift for Tablet in St.		20.00	1,963.00	20.00 $2,951.14$	20.00		2,409.14
Paul's Chapel		10 00	880.00	880.00 (9)	(6) 880.00		10.00
Journal of Cancer Research Gift Journalism Alumni Association Gift		169.00	119.50	288.50			288.50
Journalism Alumni Tuition Scholarship GiftJournalism Entertainment Gift		35.00		35.00	(10) 37.63		35.00
Jordan (William Donald) For Willis Fellowship Fund Kaliski (David J.) Gift for Religious Organization.		5.00	5.00	00.00	:		5.00
King (Willard V.) Gift for General Purposes.  Kings Crown Deposit Account.  Law School Gift for Publication of Manuscripts.  Law School Special Scholarship Gift.	ots.	6,309.22 290.14 60.00	1,500.00 2,336.73 11.89	1,500.00 8,645.95 302.03 60.00			1,500.00 8,645.95 302.03 60.00

Lawrence (Schuyler) Gift for Library  Lee (Mrs. Frederic) Gift for Department of Romance Languages.  Lee Gift for Department of Indo-Iranian Lang- uages.  Legislative Drafting Research Fund  Lewisohn Gift for Cost of Pedestal and Installation of	10.00 44.18 734.85 10,669.40		10.00 44.18 734.85 (11) 10,669.40	10.00 11) 734.85 1,617.87		9,051.53
Bust of Justice Holmes.  Low (William G.) Gift.  Library Service News Gift.	100.00 135.20 22.59	24.65	100.00 135.20 47.24	34.31		65.69 <del>7</del> 133 26 4 47.24 O
Lithuanian Professional Association Gift for Course in Lithuanian. Livingston Hall Furnishings Gift. Lum Gift	11.60	60.00	11.60	11.60		RT 0
Low (Seth) Students Association Gift.  Macy (Josiah Jr.) Foundation Gift for Research in Department of Zology.	180.00	115.00	199.05	2,100.00		
wardus uit for Special Lecturer in Antanopology.  Montgomery (Robert H.) Gift for the Library  Moore Gift for Purchase of Chinese Books.  Metallurgical Laboratory Gift.	26.72	250.00 370.00 439.63	91.93 . 276.72 370.00 439.63 .	264.02 370.00		12 70 H
National Academy of Sciences Gift for Investigations on the Synthesis of Carcinogenic Compounds  National Council of Jewish Women Gift for Scholarship.	146.16		146 16 . 500.00	200 00		R E A S U
National Lead Company—Titanium Division Fellowship Gift.  New York State Library School Association Gift for Scholarship in the School of Library Service.	1.180.00	3,000.00	3,000.00	1,250.00		RER 00:022,1
Orchestra Account—Department of Music. Outing Club—Department of Physical Education Ozanne Gift for Research Work in Extra-Sensory	,		150.00	147.61		2.39
Perception Department of Psychology		1,100.00	1,100.00	970.94	:	129.06

	Debit	Credit		5	F	Debit	Credit
	June 30,	June 30,	1938-1939	Credits	1938-1939	June 30,	June 30,
	1938	1938				1939	1939
Parker Gift for Current Expenses of the Institute of							
International Affairs	:	\$16,533.34	\$18,100.71	\$34,634.05	\$11,755.69	:	\$22,878.36
Parsons Gift for Research in Anthropology			250.00	250.00	250.00		
Paterno Library of the Casa Italiana Gift		504.09		504.09	504.09		
Phonetic Laboratory—Department of English Gift		667.35		667.35	172.13		495.22
Pi Lambda Phi Foundation Gift		4,000 00		4,000 00	2,596.51		1,403.49
Plimpton Library Gift			4.52	4.52			4.52
Plotz (Ella Sachs) Foundation Gift for Investigations							
on Hydrocarbons			100.00	100.00	100.00		
Pope Gift for Scholarships		577.50	400.00	977.50	577.50		400.00
President's Anonymous Gift		615.34		615.34			615.34
Printing Research Gift	:	:	7,000.00	7,000.00	1,053.17		5,946.83
Protestant Episcopal Society Gift for the Society's							•
English Seminary Prize for 1939	: : : : : : : : : : : : : : : : : : : :		00.09	00.09	00.09		:
Publication Gift—School of Library Service		2,397.02	2,745.68	5,142.70	1,027.50		4,115.20
Publications in the Indo-Iranian Series		2,209.92	90.60	2,300.52			2,300.52
Putnam Gift—Mathematics		200.00	:	200.00	114.43		85.57
Queen Wilhelmina Professorship Gift			3,250.00	3,250 00	3,250.00		
Randolph (William Fitz) Bequest		50,838.55 DR	ъв 567.07	50,271.48	:		50,271.48
Relief of Needy Columbia College Undergraduates		20.00		20.00	20.00		
Renovation of the 1882 Memorial Window		75.00		75.00	75.00		
Research Corporation Gift for Awards to Distin-							
guished Scientists			5,000.00	5,000.00	5,000.00		
Research Corporation Gift for the Advancement and							
Extension of Technical and Scientific Investiga- tion Research and Experimentation		1.683.11	5.250.00	6.933.11	4.267.06		2.666.05
Research in Food Chemistry Gift.		193.73	800.00	993.73	746.00		247.73
Research in Social Science Gift.		1,199.03	132,436.41	133,635.44	77,381.82		56,253.62

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0.5	
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Rich, (Wiley D.) Gift for Accounting Department Rockefeller Foundation Gift for Advanced Humanis-			10.00	10.00			10.00	
tic Work		4,464.47		4,464.47	4,464.47	:		
Eastern StudiesRockefeller Foundation Gift for Promotion of Jana-			5,000.00	5,000.00	3,090.60		1,909.40	
nese Studies		117.43	2,500.00	2,617.43	2,081.65		535.78	R
logical Effects of Heavy OxygenRockefeller Foundation Gift for Research in Chemi-		161.66		161.66 (12)	(12) 161.66		E P (	E P (
cal Embryology		1,000.00	1,000.00	2,000.00 (13)	(13) 1,989.80	:	10 20	) B (
zyme TyrosinaseRockefeller Foundation Gift for Research in Food			1,600.00	1,600.00	398.12		1,201.88	r o
ChemistryRockefeller Foundation Gift for Research in the De-			5,500.00	5,500.00	5,500.00			F
partment of Zoology		103.24	2,250.00	2,353.24	1,715.32		637.92 н	тн
School.			2,000.00	2,000.00	2,000.00		:	Е
Avorage of the property of the			1,000.00	1,000.00	1,000.00	:	T K	TR
Rocketener Foundation Gilt for Social Science Research	:	63,988.25	52,302.77	116,291.02	116,291.02 14)116,291.02	:	15 F	ΕA
		166.70	1,000.00	1,166.70	1,166.70			SU
Rocketener (John D., Jr.) Gut for Department of History		1,720.66	:	1,720.66	1,720.66		RE	RE
Rosoff Citt for Prize in Accounting		691.48	25.00	691.48	25 00		691.48	R
Sage Gift for General Income.				10.00			00	
School of Business Accounting Scholarship Gift		00.67	200.00	200.00			200.00	
School of Business Association Gift		38.64	27.14	65.78			65.73	5

	COLUMBIA UNIVERSITI
Credit Balances June 30, 1939	\$15.00 37.68 231.53 125.00 500.00 500.00 787.09 350.00 62.52 62.52 1,679.62 1,679.62 1,679.62 1,679.62
Debit Balances June 30, 1939	
Expended 1938-1939	(15) \$11.00 20.00 200.00 224.99 41.66 500.00 700.00 700.00 17.200.00 141.00
Total Credits	\$11.00 (15) 20.00 20.00 37.68 456.52 125.00 500.00 500.00 500.00 1,050.00 1,050.00 1,050.00 1,200.00 2,400.25 17,200.00 1,200.00 1,200.00 1,200.00 1,200.00 1,200.00 1,200.00 1,200.00 1,200.00 1,200.00 1,200.00 1,200.00 1,492.78 1,492.78
Received 1938-1939	\$15.00 200.00 500.00 500.00 500.00 1,000.00 2,400.00 17,150.00 398.02 407.04 636.00 7.26
Credit Balances June 30, 1938	\$11.00 20.00 20.00 37.68 456.52 125.00 500.00 787.09 787.09 787.09 787.09 125.00 125.00 125.00
Debit Balances June 30, 1938	
	School of Business—Dean's Fund Gift School of Business—Library Gift Seidman (Edward S.) Scholarship Gift Seligman (Edward S.) Scholarship Gift Seligman (Baward S.) Scholarship Gift Seligman (Isaac N.) Bequest. Smith (Loavid Eugene) Gift for the David Eugene Smith Library Smith Library Social Science—Study in Social Work. Social Science—Study in Social Work. City Sons of the Revolution Scholarship Gift Special Research Equipment Gift for Inquiry Regarding Juvenile Delinquency in New York City Sons of the Revolution Scholarship Gift Special Research Equipment Gift for Department of Physics Organic Chemistry Staff (Mary E.) Gift for Refurnishing Women's Rooms on the Campus. State Scholarships State Scholarships State Scholarship Gift Summer Session Gift for Entertainment. Summer Session Gift for Entertainment Summer Session Gift for Entertainment Summer Session Writers Club Gift

	R	EP	ORI	r o	F	т н	Е	T F	E	A S	UI	RER			8
167.87		3,500.00		41.00	20.00	10.00					3,020.66	290.00			
794.25 265.80	250 00	2 680 00	500.00	8,500.00			240.27	2,886.02	225.00	350 00	6.979.34	1,210 00	125.00	440.00	
167.87 2,492.84 265.80	250.00	3,500.00	500.00	8,500.00	20.00	10.00	240.27	2,886 02	225.00	350.00	200.00	1,500.00	125.00	440.00	-
198.23	250.00	3,500.00	500.00	8,500.00				2,886.02	225.00		200.00	1,500.00		440.00	
167.87 2,294.61 265.80	:	:			20.00	10.00	240.27	:	00 801	350.00	5.000.00		125.00	:	
		:						:					:		-
Sutliff (Mary Louisa) Cift for the Purchase of Books (School of Library Service).  Syllabus Fund of School of Business.  Syllabus Fund of University Extension.	The Texas Company Gift for Research in The Texas Company Gift for Research on Thin Film	Lubrication Teachers College Gift for General Infirmary Expenses	Union Theological Seminary Gift for Medical Service Union States Public Health Service Gift for Ameri-	ean Journal of Cancer	University Extension—Department of Accounting Gift.	University Hall Fund Gift	University Fatents, Inc. Chit for Kescarch by Dr. Bucky	University Patents, Inc. Gift for Research in Chemistry.	Urey Gift for Research in Chemistry	Varsity Drag Chiclor Achieue Awards Warren (Charles P.) Medal Gift	Warren (George E.) Gift for Student Aid,	Whitney (William C.) Foundation Gift for a Fellowship in Department of Philosophy	Whitney (William C.) Foundation Gift for Research on International Labor Relations.	Whitney (William C.) Foundation (all to Scholar-ships in Laboratory of Design Correlation (School of Architecture)	

	Debit Balances June 30, 1938	Credit Balances June 30, 1938	Received 1938-1939	Total Credits	Expended 1938-1939	Debit Balances June 30, 1939	Credit Balances June 30,
Wiley Gift for Restoring the 1882 Class Windows in Hamilton Hall		\$6.80	\$1,000.00	\$1,000.00	\$819.86		\$180.14 6.80
MEDICAL SCHOOL Adler Gift for School of Medicine		4.97		4.97	4.97		
American College of Dentists Gift			1,920.00	1,920.00	1,920.00		345.54
American Medical Association Gift for Therapeutic Research		31.84	300.00	331.84	325.16		6.68
Anatomy Publication Gift.		274.10		274.10 10,290.80	127.96 5,539.86		146.14
Anonymous Gift for Salaries in the Department of Neurology.		2,083.32	2,500.00	4,583.32	2,500.00		2,083.32
Anonymous Gift for Salaries in the Department of Obstetrics and Gynecology		:	750.00	750.00	:	:	750 00
Anonymous Gift for Scholarships in College of Physicians and Surgeons.	:		12,000.00	12,000.00			12,000.00
Anonymous Gift for Scholarships at the Areucaa School.  Anonymous Gift for Special Research—Dermatology		12,066.58	371.72	12,438.30 11,000.00 (26)	3,000.00 (26) 1,000.00		9,438.30 10,000.00
Anonymous Gift for Kesearch in the Department of Surgery.			3,500.00	3,500.00	3,500.00		
Study		1,408.66	:	1,408.66	1,156.91		251.75
Anonymous Gift for Office Supplies and Sundries— Medical School			92 00	92.00	92.00		

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:		3,000.00	563.50	2,500.00	8,641.19	10,667.30			•	1,200.00	314.50									000	102.93	508.93	605 91	5,041.43			
525.00	1,500.00			5,000.00	6,080.13	5,492.70	3	00.069			1,765.50	1,500.00		1,500.00	0	2,000 00		163 48	57.58		230.00		00 100 0	3.580.50		080 00	1
525.00	1,500.00	3,000.00	563.50	7,500.00	14,721.32	16,160.00	4	00.064	4	1,200.00	2,080.00	1.500.00		1,500.00	6	2,000.00		163.48	57.58	0	992.93	508.93	0000	8,621.93		280 00	1
500.00	:	3,000.00		5,000.00	8,100.00	7,900.00	6	00.069	,	1,200.00						:			:		: : : : : : : : : : : : : : : : : : : :	208.93	0	2,500.00			
25.00	1,500.00	:	563.50	2,500.00	6,621.32	8,260.00					2,080.00	1,500.00		1,500.00		2,000.00		163.48	57.58		992.93		7	8.437.43		080 00	100:001
		:										:													: : 		
Anonymous Gift for Research in Biological Chemistry	Anonymous Gift toward Salary of a Part Time Assistant Dean of the Medical School.	Anonymous Gift for the Financing of the Electrophoresis Apparatus for the Medical Center	Biological Chemistry—Special Printing	Brain Kesearch Foundation Chic—Department of Neurology	Cancer Research Gift—Department of Surgery	Carnegie Corporation Gift for Chemical Research in the Field of Sex Hormones	Carnegie Corporation Gift for Research in Biological	Chemistry	Carnegie Corporation Gift for Research on Cell Divi-	sion	Carnegie Corporation Gift for Research in Cytology.	Carnegie Corporation Gift for Research on Deficiency	Diseases in Certain Animals (Biological Chem-	istry)	Carnegie Corporation Gift for Normal Child Devel-	opment Study	Carnegie Corporation Gift for Research in Post-	operative Thrombosis and Embolism	Chase (Irving H.) Gift for Purchase of Apparatus	Chemical Foundation Gift for Research on Brain	Chemistry	Chemical Pathology Research Gift	Ciba Pharmaceutical Products, Inc. Gift for Research	In Department of Biological Chemistry	Committee on Scientific Research of the American	Medical Association Gift for Studies on Obstruc-	olve Jaundice

18,943.20		149.76						00.09		34.52		25.00		576.15		339.36			225.00	655,74					3,349.26	1	4,400.45		2,508 37
						:		:		:													:						
6,975.00	d	3.00	•	50.00		500.00		1,440.00		165.48				2,423.85		13,828.53	64.97		275.00	300.00		1,800.00	1,500.00		6,933.91		378.44		2,629 12
25,918.20		152.76	1	50.00		200.00		1,500.00		200.00		25.00		3,000.00		14,167.89	64.97		200.00	955.74		1,800.00	1,500.00		10,283.17	1	4,778.89		5,137.49
746.08		00 000 6	,	50.00		200.00		1,440.00				25.00		3,000.00		15,000.00			200 00			1,600.00	1,500.00		8,100.00		2,000.00		5,000.00
25,172.12	6	152.76		:				00.09		200.00	-						64 97		:	955.74		200.00			2,183.17		2,778.89		137.49
		:				:										832.11					,	:	:				:		:
Hayden (Charles) Foundation Gift for Medical School Scholarships	Hercules Powder Company Gift for Research in the	Hise (Philin Hanson Ir.) Mamorial Cift	Hoffman—La Roche, Inc., Gift for the Purchase of	Apparatus for Department of Pharmacology	Hoyt (Mrs. John Sherman) Gift for Normal Child	Development Study	Insulin Research Gift-Department of Practice of	Medicine	Jablons Gift for Research on Kidney Extract-	Department of Pharmacology	Jarcho (Julius) Gift for Physicians and Surgeons	Library	Jovan Laboratories, Inc., Gift for Research on the	Value of Chlorophyll as a Bactericidal Agent	Kellogg (W. K.) Foundation Gift for Study of Rheu-	matic Fever	Lambert (Adrian) Gift	Lederle Laboratories, Inc., Gift for Research in	Surgery	Lee (Dr. and Mrs. Frederic S.) Gift	Lee (Dr. and Mrs. Frederic S.) Gift for Department	of Dermatology	Lerner Gift for Salaries—Department of Zoology	Macy (Josiah Jr.) Foundation Gift for Problems of	Arteriosclerosis	Macy (Josiah, Jr.) Foundation Gift for Problems of	Arteriosclerosis Under Dr. Levy	Macy (Josiah, Jr.) Foundation Gift for Investigation on the Relation of Lipoids to Processes of	Growth and Aging

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		2,410.25	2,200.00	2,200.00		186.67	:	86.20	:		201,45	50.00	:	228.70	448.33	
					\$61.28											
	12,300.00	1,959.75			10,880.58	00.009	40.57	1,063.80	2,400.00	1,000,00	1,998.72	3,130.00	200.00		102.63	
	12,300.00	4,400.00	2,200.00	2,200.00	10,819.30	786.67	40.57	1,150.00	2,400.00	1.000.00	2,200.17	3,180.00	200.00	228.70	102,63	
	12,300.00	4,400.00	2,200.00	2,200.00	11,534.90	:	:	1,150.00	1,800.00	1.000.00	2,200.17	3,130.00	200.00			
			:		:	786.67	40.57	:	00.009			50.00		228.70	448.33	1
			:		\$715.60	:										
Markle (John and Mary R.) Foundation Gift for Investigation on the Biological and Clinical Effectiveness of High Voltage and Low Voltage	X-Rays.	Markie (John and Mary Jr.) Foundation Gill, in Opn-thalmology	Markle Foundation Oilt for the Chemical Study of Serum—Department of Biochemistry	Markle Foundation Gift for Radioactive Elements in Biochemistry	Matheson (William J.) Commission Gift—Department of Neurology.	Mead Johnson and Company Gift for Research in Department of Discases of Children	Merck and Company Gift for Work in Pollomyelitis —Department of Bacteriology.	National Committee on Maternal Health, Inc., Gift for Research in Department of Psychiatry	Gynecology.	National Oil Products Company Gift for Research in Dental Caries in De Lamar Institute of Public Hoalth	National Tuberculosis Association Gift for Bacter- iology	National Tuberculosis Association Gift for Department of Practice of Medicine.	National Tuberculosis Association Gift for Research in School of Business	Obstetrics and Gynecology—Chemical Foundation Gift.	Ophthalmology—Special Research Gift	

	Debit Balances June 30, 1938	Credit Balances June 30, 1938	Received 1938-1939	Total Credits	Expended 1938-1939	Debit Balances June 30,	Credit Balances June 30,
Otology Research Gift		\$202.84	\$750.00	\$952.84	\$884.09		\$68.75
Personal Products Corporation Gift in Department of Obstetries and Gynecology			1,200.00	1,200.00	1,000.00		200.00
Phi Delta Epsilon Fraternity Gift for the Purchase of Books for the Library of the College of Physi- cians and Surgeons.		18.82	50.00	68.85	51.17		17.65
Phillip Morris and Company Gift in Pharmacology		1,424 58	2,000.00	3,424.58	1,9		1,475.05
Physicians and Surgeons Scholarship Gift		14.00		14.00 (19)	(19) 14.00		
Equipment for the Study of Air Conditioning— De Lamar Institute of Public Health		1,155.97		1,155.97	444.78		711.19
Pierce (John B.) Foundation Gift for Research in Air Bacteriology at De Lamar Institute of Public							
Health		6,386.84	8,325.00	14,711.84	9,577.90		5,133.94
Presbyterian Hospital Gift for Bacteriology Depart- mental Appropriation			150.00	150.00	150.00	:	:
Proetor Gift for Tissue Culture Studies in Trachoma.		656.07	1,000 00	1,656.07	1,351.35		304.72
Proctor Gift for Salaries in Department of Ophthalmology		2,875.00	1,500.00	4,375.00	4,474.60	\$99.60	
Psychiatry—Social Service Gift		291.66		291.66			291.66
Reinach Gift No. 1 for the Investigation of Inverte- brate Neurology.		550.00		550.00 (20)	(20) 550.00		
Reinach Gift No. 2 for Research in Department of		139 53		139.53			132.53
Reinach Gift No. 3 for Research in Invertebrate							
Neurology.  Research in Dental Materials Gift.		880.00	1,000.00	1,880.00	1,880.00 (21) 1,880.00 59.85 26.11	80.00	33.74
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	4,143.29				678.70	2,693.79	833.34	8,177.38	790.00		:	1,000.00	7.199.77	12,489.80	188.00	2,182.58
		187.37														
3,000.00	16,856.71	6,411.45	13,300.00	2,441.81	12,615.45 (22)11,936.75	17,355.25 (23)14,661.46	2,916.66	11,822.62	460.00	(24) 2,175.00	1,800.00	200.00	330.23		(25) 750.03 112.25	161.90
3,000.00	21,000.00	6,224.08	13,300.00	2,441.81	12,615,45	17,355.25	3,750.00	20,000.00	1,250.00	2,175.00 (24)	1,800.00	1,200.00	7.70	13,114.80	750.03 (25) $300.25$	2,344.48
3,000.00	21,000.00	6,100.00	13,300.00	2,000.00	11,000.00	14,000.00	4,000.00	20,000.00	1,250.00	1,800.00	1,350.00	1,200.00	2,530.00	7,936 79		
:		124.08	:	441.81	1,615.45	3,355.25		:		375.00	450.00		7.70	5,178.01	750.03 300.25	2,344.48
		:		:			\$250.00	:			:	:				
Rockefeller Foundation Gift for Electrophoresis— Department of Anatomy	Desired to Anatomy	Biochemistry and Genetics of Canine Cystinuria.	Rockefeller Foundation Gift for Research—Department of Biological Chemistry (Isotopes)	Rockefeller Foundation Gift for Research on Vita- mins and Related Substances in Plant Growth	mon Cold	Rockeleller Foundation Gift of Research on Consultational Aspects of Disease.	ment of Practice of Medicine	Rocketeller Foundation Gift in Support of Teaching and Research in Neurology.	Rockefeller Foundation Gift for Research in Neuro Bathology	ment of Pathology.	Kockeleller Foundation Gift in Support of Research on Speech Disturbances and other Neurological Problems.	and Gynecology.	Salzer (Benjamin) Gift—Neurology	School of Nursing Special Account	Sex Research Fund—AnatomySilver Research Gift—Institute of Public Health	Smith, Kline and French Laboratories Gift for Research in Department of Pharmacology

\$687,662.10

	Debit	Credit		E	Description of the	Debit	Credit
	balances June 30,	balances June 30,	1938-1939	Credits	1938-1939	June 30,	June 30,
	1938	1938				1939	1939
Special Research Gift—Pathology		\$2,081.84	\$1,700.00	\$3,781.84	\$290 00		\$3,491.84
Special Scholarship Gift-Medical School		1,047.50	1,614.00	2,661.50	150.00		2,511.50
Special Surgical-Bacteriological Research Fund in the			1	6	•		0
Department of Surgery		1,560.21	382.05	1,942.26			1,942.26
Squibb (E. R.) and Sons Fellowship Gift—Depart-	6		00 000 6	02 620 1	1 807 09		72 77
ment of Biological Chemistry.	\$146.50		2,000.00	1,000.00	1,001.33		00000
Standard Cap and Seal Corporation Gift		629.60		629.60			629.60
Straus (Percy S.) Gift in Neurology			2,000 00	2,000.00	1,555.69		444.31
Student Health Gift		30.00		30.00	30.00		
Surgical Pathology Laboratory—Special Assistance				_			
Gift		2,057.12	1,000.00	3,057.12	399.99		2,657.13
University Patents Inc. Gift for Chemical Pathology							
Research		394.44	6,000.00	6,394.44	6,394.44		
Upjohn Company Gift for Research in the Depart-							
ment of Anatomy		200.00		200.00	200.00		
Van Gerbig Gift for the New Graduate Laboratories.		5,000.00		5,000.00	4,440.00		560.00
Warner (William R.) and Company, Inc. Gift for Re-							
search in Arteriosclerosis			5,000.00	5,000.00			5,000.00
Warner (William R.) and Company, Inc. Gift for Re-		00 011	0	140 01	22 006		77
Western Dental School, The and two of		440.09	04.1	10.714	990.00		01:10
warner (William 18.) and Company, inc. and two of their Subsidiaries Gift for Original Research in							
Medicine and Pharmacology		5,538.40		5,538.40	3,656.03		1,882.37
Webster Gift for Purchase of the Jerome P. Webster							
Library of Plastic Surgery		189.08	200.00	80.689	721.44	\$32.36	
Wiley (Louis) Memorial Fund in Neurology		:	1,400.00	1,400.00	1,386.50		13.50
	\$51.500.85	\$627.873.55	\$917.999.86	\$917.999.86 \$1.494.372.56	\$829.848.10	\$13,679.04	\$678,203.50
			.				
			Less Transfers.		142,186.00		

## GIFTS AND RECEIPTS—NOTES

#### TRANSFERS

( - <i>)</i>	To Research in Social Science Gift	\$6,676.41
(2)	To Chemical Foundation Gift for Research in the Field of Solvents per-	
	taining to the Oil Industry	621.31
(3)	To Principal A. V. Williams Jackson Fellowship Fund	8,664.51
(4)	To Anonymous Gift for Furnishing Rooms for Head of Men's Residence	
	Halls	4.83
(5)	To Anonymous Gift for Furnishing Rooms for Head of Men's Residence	
	Halls	109.30
(6)	To Anonymous Gift for Furnishing Rooms for Head of Men's Residence	
	Halls	77.20
(7)	To Syllabus Gift of School of Business	198.23
(8)	Refund to Donor	36,42
(9)	To University Land, Buildings and Equipment	880.00
(10)	To Journalism Alumni Association Gift	16.81
(11)	To Principal A. V. Williams Jackson Fellowship Fund	734.85
(12)	Refund to Donor	61.66
(13)	To Rockefeller Foundation Gift for Research in Department of Zoology	1,000.00
(14)	To Research in Social Science Gift	116,291.02
(15)	To Business Alumni Scholarship Fund	11.00
(16)	To Reserve for Amortization of Debt	500.00
(17)	Refund to Donor	240.27
(18)	To General Education Board Gift for Apparatus and Equipment-	
	Normal Child Development Study	10.02
(18)	Refund to Donor	258.70
(19)	To Special Scholarship Gift—Medical School	14.00
(20)	To Benjamin Salzer Gift—Neurology	550.00
(21)	To Benjamin Salzer Gift—Neurology	1,880.00
(22)	Refund to Donor	1,217.48
(23)	Refund to Donor	6.95
(24)	Refund to Donor	375.00
(25)	Refund to Donor	750.03
(26)	To Dermatology, Special Research Gift	1,000.00
	<del>-</del>	

\$142,186.00

# SECURITIES OWNED FOR ACCOUNT OF SPECIAL ENDOWMENTS, GENERAL ENDOWMENTS AND DESIGNATED FUNDS

#### AT JUNE 30, 1939

## **Bonds**

## SCHEDULE I—RAILROAD

		Book Value
\$257,000	Baltimore and Ohio R. R. Co. 4% First Mortgage Bonds, due 1948	\$145,640.00
100,000	Canadian Pacific Ry. Co. 4% Convertible Collateral Trust Bonds,	,,
	due 1949	103,913.45
	1961	35,970.00
1,000	Central R. R. Co. of New Jersey 5% General Mortgage Bonds, due 1987	1,000.00
100,000	Des Plaines Valley Ry. Co. $41\!\!/\!_2\%$ First Mortgage Bonds, due	
300,000	1947 Florida East Coast Ry. Co. 5% First and Refunding Mortgage	100,100.00
83 000	Bonds, due 1974 (Certificates of Deposit)	293,000.00
	Bonds, Series H, due 1946	83,000.00
1,000	Great Northern Ry. Co. 5% General Mortgage Bonds, Series C, due 1973	862.50
89,000	Great Northern Ry. Co. 5½% General Mortgage Bonds, due	002.00
	1952	84,318.64
164,000	Illinois Central R. R. Co. and Chicago, St. Louis and New Orleans R. R. Co. 4½% Joint First and Refunding Mortgage Bonds	
	due 1963	79,481.25
96,000	Illinois Central R. R. Co. and Chicago, St. Louis and New Orleans R. R. Co. 5% Joint First and Refunding Mortgage	
	Bonds, due 1963	93,544.26
5,000	Missouri Pacific R. R. Co. 4% General Mortgage Bonds, due	,
	1975	3,937.50
300,000	Missouri Pacific R. R. Co. 5% First and Refunding Mortgage Bonds, Series F, due 1977	298,906.25
250,000	Missouri Pacific R. R. Co. 5% First and Refunding Mortgage	
	Bonds, Series I, due 1981	236,875.00
90,000	New Orleans and Northeastern R. R. Co. 4½% Refunding and	00.000.50
50.000	Improvement Mortgage Bonds, due 1952	83,202.76 53,107.14
	New York Central R. R. Co. 34% Secured Bonds, due 1932 New York Central R. R. Co. 5% Refunding and Improvement	55,107.14
10,000	Mortgage Bonds, due 2013	6,840.00
184,000	Northern Pacific Ry. Co. 5% Refunding and Improvement	
	Mortgage Bonds, Series C and D, due 2047	167,939.78
14,000	Northern Pacific Ry. Co. 6% Refunding and Improvement	0.000.07
50.000	Mortgage Bonds, due 2047	9,833.87 53,107.14
	Pennsylvania R. R. Co. 3½% Convertible Debentures, due 1952 Pere Marquette Ry. Co. 4½% First Mortgage Bonds, due 1980	4,968.75
	St. Louis-San Francisco Ry. Co. 4% Prior Lien Bonds, Series A,	4,500.10
300,000	due 1950 (Certificates of Deposit)	256,393.75
50,000	Texas and Pacific Ry. Co. 5% General and Refunding Mortgage	42,750.00
15.000	Bonds, Series B, due 1977	42,100.00
,- 30	Bonds, Series C, due 1979	12,825.00
5,000	Wabash R. R. Co. 5% First Mortgage Bonds, due 1939	4,637.50
200,000	Wabash R. R. Co. 5% Second Mortgage Bonds, due 1939	200,146.57

	REPORT OF THE TREASURER	37
	W. L. D. G. 50/ Defending and Concret Mariage Rands	Book Value
\$91,000	Wabash Ry. Co. 5% Refunding and General Mortgage Bonds, due 1976	\$89,215.00
20.000	West Shore R. R. Co. 4% First Mortgage Bonds, due 2361	18,475.00
103,000	Wisconsin Central Ry. Co. 4% First Mortgage Bonds, due 1949	88,430.00
	_	\$2,652,421.11
	Bonds	
	SCHEDULE II—PUBLIC UTILITY	
\$31,000	American Water Works and Electric Co $5\%$ Debentures, Series	
	B. due 1975	\$30,347.50
19,000	American Water Works and Electric Co. 6% Debentures, Series A, due 1975	20,180.95
100 000	Associated Gas and Electric Corp. 334% Income Debentures,	•
	due 1978	44,247.50
150,000	Bellows Falls Hydro-Electric Corp. 5% First Mortgage Bonds,	
	due 1958	153,634.22
20,000	Birmingham Water Works Co. 5% First Mortgage Bonds, due	20,728.56
100 000	1957 Brooklyn-Manhattan Transit Corp. 4½% Collateral Trust	20,120.00
100,000	Bonds, due 1966	100,000.00
22.500	Central Arkansas Public Service Corp. 5% First Lien and Col-	
	lateral Trust Bonds, Series A, due 1948	21,783.75
250,000	Commonwealth Edison Co. 31/2% Convertible Debentures, due	
	1958	262,481.34
55,000	Continental Gas and Electric Corp. 5% Debentures, due 1958	51,782.50
100,000	Federal Light and Traction Co. 6% First Mortgage Bonds, due 1942	103,455.00
100 000	Federal Light and Traction Co. 6% Debentures, due 1954	103,541.67
50,000	Lone Star Gas Corp. 3 ½% Sinking Fund Debentures, due 1953.	51,122.33
9 000	Mississippi Power and Light Co. 5% First Mortgage Bonds, due	
	1957	7,950.00
200,000	Monongahela West Penn Public Service Co. 6% Debentures,	
	due 1965	200,000.00
24,000	New Mexico Power Co. 5% First Mortgage Bonds, Series A, due	22,695.00
	1958 Oklahoma Natural Gas Co. 4½% First Mortgage Bonds, due	22,030.00
46,000	1951	48,108.33
60 000	Southern Natural Gas Co. 4½% First Mortgage Pipe Line Sink-	
	ing Fund Bonds, due 1951	59,734.50
41,000	Springfield Gas and Electric Co. 5% First Mortgage Bonds,	
	Series A. due 1957	43,177.50
100,000	West Penn Electric Co. 5% Debentures, due 2030	99,460.00
10,000	Wisconsin Power and Light Co. 4% Debentures, due 1944	10.000.00 14,943.75
15,000	Wisconsin Power and Light Co. $4\%$ Debentures, due 1945 Wisconsin Power and Light Co. $4\%$ Debentures, due 1946	24,912.50
25,000	Wisconsin Power and Light Co. 4/0 Debentures, due 1010	
		\$1,494,286.90 ————
	Bonds	
	SCHEDULE III—INDUSTRIAL	

\$73,000	American I. G. Chemical Corp. 5½% Convertible Depentures,	
	due 1949	\$76,587.85
87,000	Anaconda Copper Mining Co. 4½% Debentures, due 1950	91,395.64

		Book Value
		\$95,500.00
	tures, due 1951	49,612.60
,		47,375.00
	Electric Auto-Lite Co. 4% Convertible Debentures, due 1952	53,259.62
200,000	\$100,000 Bethlehem Steel Corp. 3½% Convertible Debentures, due 1952 48,000 Consolidated Oil Corp. 3½% Convertible Sinking Fund Deben-	199,121.55
48 000		51,625.72
		105,146.87
		49,125.00
		49,375.00
		\$868,124.85
	Bonds	
	SCHEDULE IV—MUNICIPAL	
\$100	City of New York 4% Corporate Stock due 1957	\$103.49
		3,025.10
		453.13
		516.80
		500.00
		105.00
		522.89
		2,018.24
		\$7,244.65
	Bonds	
	SCHEDULE V-REAL ESTATE	
\$5,580	657 Lexington Ave. Corp. 4% Debentures, due 1956	\$1.00
		1.00
3,250	15 Park Row Corp. 4% First Mortgage Bonds, due 1952	552.50
010		111.00
	Savoy-Plaza Inc. 3% Second Mortgage Income Bonds, due 1956	427.50
3,000		2,800.00
3,600		1.00
		\$3,894.00
	Bonds	
	SCHEDULE VI—MISCELLANEOUS	
	Columbia University Club 5% Mortgage Bonds, due 1942 Eta Chapter, Alpha Sigma Phi Fraternity, Champaign, Illinois	\$43,925.00
	3% Building Fund Bonds, due 1940	50.00
2,000	New York World's Fair 1939 Inc. 4% Debentures, due 1941	2,000.00
	Town Hall Club Inc. 4% Debentures, due 1955	1.00
		\$45,976.00

## Preferred Stocks

## SCHEDULE I—RAILROAD

Shares		Book Value
	Atchison, Topcka and Santa Fe R. R. Co 5% Non-Cum Union Pacific R. R. Co. 4% Non-Cum	\$106,952.53 6,700.00
		\$113,652.53

## Preferred Stocks

## SCHEDULE II—PUBLIC UTILITY

500	American District Telegraph Co. 7% Convertible	\$56,310.00
500	American Gas and Electric Co. \$6	52,000.00
600	Cincinnati Gas and Electric Co. 5%	63,100.31
1,000	Columbia Gas and Electric Corp. 6%	105,250.00
225	Consolidated Edison Co. of New York Inc. \$5	20,693.75
500	Consumers Power Co. \$4.50	50,250.00
1,000	General Telephone Corp. \$3 Convertible	48,635.00
500	New York Power and Light Corp. \$6	50,380.00
2,000	North American Co. 534% (Par \$50)	104,433.48
500	Northern States Power Co. \$5	49,187.50
500	Ohio Public Service Co. 6%	49,709.52
1,000	Pacific Lighting Corp. \$5	103,500.00
200	Peninsular Telephone Co. 7%	20,419.94
650	Public Service Corp. of New Jersey 6%	75,075.00
1,000	Rochester Gas and Electric Co. 6%, Series D	101,900.00
83	Tampa Electric Co. 7%, Series A	9,565.75
10	Union Electric Co. of Missouri, \$5	1,060.00
200	United Gas Improvement Co. \$5	20,400.00
1,000	West Penn Electric Co. 7%	93,204.30

## \$1,075,074.55

## Preferred Stocks

## SCHEDULE III—INDUSTRIAL

300	American Cyanamid Co. 5% Convertible (Par \$10)	\$3,000.00
1,000	American Locomotive Co. 7%	119,312.50
500	American Rolling Mill Co. 4 ½% Convertible	50,500.00
1,185	American Smelting and Refining Co. 7%	147,271.83
20	American Tobacco Co. 6%	2,740.00
100	American Woolen Co. 7%	7,550.00
340	Armour and Co. of Deleware 7%	36,963 60
500	Beneficial Industrial Loan Corp. \$2.50	25,519.26
500	Crane Co. 5% Convertible	51,000.00
193	Endicott Johnson Corp. 5%	20,023.75
50	Gimbel Brothers Inc. \$6	2,300.00
1,000	International Nickel Co. of Canada Ltd. 7%	137,005.00
500	Loew's Inc. \$6.50	52,075.00
500	National Bond and Investment Co. 5%, with warrants	50,750.00
250	New York Times Co. 8% Third Non-Cum	25,000.00
1,000	Pure Oil Co. 5% Convertible	76,270.00
1,000	Tide Water Associated Oil Co. \$4.50 Convertible	96,321.50
33	Towne Securities Corp. 7%	350.00

Shares  1,000 Twentieth Century-Fox Film Corp. \$1.50 Convertible  100 United States and Foreign Securities Corp. \$6	Book Value \$37,110.00 4,600.00
100 United States and International Securities Corp. \$5, with warrants.  100 United States Rubber Co. 8% Non-Cum.  60 United States Steel Corp. 7%.  210 Van Raalte Co. Inc. 7%.	2,100.00 4,562.50 5,763.75 23,940.00
	\$982,028.69
Preferred Stocks	
SCHEDULE IV-MISCELLANEOUS	
75 Huron Mineral Land Co	\$1.00
21 CCC 67 New England Investment and Sequeity Co. Contiferator of Page	
\$1,666.67 New England Investment and Security Co. Certificates of Beneficial Interest for Preferred Stock.	166.67
Shares	
106 Rolfe Coal Mining Co           2 Samarkand, Inc. 8%	2,650.00
	\$2,818.67
Common Stocks	
SCHEDULE I—RAILROAD	
2,000       Atchison, Topeka and Santa Fe R. R. Co.         4,500       Great Northern Ry. Co. (Pfd.).         100       Illinois Central R. R. Co.         1,000       Louisville and Nashville R. R. Co.         2,016       New York Central R. R. Co.         1,160       Norfolk and Western Ry. Co.         5,000       Pennsylvania R. R. Co.         2,200       Southern Pacific Co.         100       Southern Ry. Co.         2,000       Union Pacific R. R. Co.	\$263,546.87 444,665.00 3,250.00 129,628.25 92,402.75 232,960.90 171,047.55 208,894.14 3,275.00 302,498.72 \$1,852,169.18
Common Stocks	
SCHEDULE II—PUBLIC UTILITY	
2,050 American Telephone and Telegraph Co 2,000 Consolidated Edison Co. of New York Inc 1,000 Consolidated Gas, Electric Light and Power Co. of Baltimore 1,000 National Fuel Gas Co 1,000 Pacific Gas and Electric Co	\$321,453.50 85,500.00 90,175.00 19,450.00 39,275.00 \$555,853.50

## Common Stocks

## SCHEDULE III—INDUSTRIAL

Shares		Book Value
1.000	Addressograph-Multigraph Corp	\$35,437.50
1,500	Air Reduction Co	71,445.50
500	Allied Chemical and Dye Corp	74,233.00
10	Amerex Holding Corp	137.50
525	American Can Co.	59,170.75
100	American Car and Foundry Co	2,750.00
3,000	American Cyanamid Co., "B"	104,975.00
100		3,450.00
6,000	American Radiator and Standard Sanitary Co	102.457.50
650	American Tobacco Co., "B"	56,200.00
100		2,687.50
	Cerro de Pasco Copper Corp	27,020.83
65		176,125.00
1,000		42,170.00
3,680	Commercial Investment Trust Corp	187,323.92
500	Continental Can Co	31,149.66
	Continental Oil Co.	16,757.30
	Creole Petroleum Corp	13,312.50
1,000	· · · · · · · · · · · · · · · · · · ·	31,937.12
10,000	General Electric Co	589,745.01
500	General Foods Corp	18,875.00
	General Motors Corp.	157,221.50
	Great Western Sugar Co	2,900.00
500	5	21,915.00
	Homestake Mining Co	53,449.88
1,000	Hudson Bay Mining and Smelting Co., Ltd	33,647.50
2,000	Humble Oil and Refining Co.	143,375.00
301	1 100 International Business Machines Corp	44,419.00
	International Nickel Co. of Canada, Ltd	180,770.00
1,000	Kellogg Co	27,500.00
2,000	Kennecott Copper Co	95,435.00
1,500	· · ·	83,375.00
	Liggett and Myers Tobacco Co., "B"	55,627.00
	Loew's Inc.	50,146.44
600		21,037.50
1,000	• •	90,900.00
378	Metal and Thermit Corp.	35,920.00
600	Montgomery Ward and Co	34,795.00
1.000	National Lead Co.	15,122.49
1,000	Newmont Mining Corp	107.354.38
500	Owens-Illinois Glass Co.	47,475.00
	J. C. Penney Co	93,175.00
2,000	Phelps Dodge Corp	88,028.30
450		45,000.00
	Pittsburgh Plate Glass Co	63,012.50
1,000		52,429.50
80		930.00
1,000	Remington Rand Inc.	24,200.00
2,000	R. J. Reynolds Tobacco Co., "B"	111,100.00
1,000	Sears Roebuck and Co.	74,966.54
1,000	Sherwin-Williams Co.	112,147.50
	Socony-Vacuum Oil Co.	45,137.00
	Sperry Corp. V. T. C	18,718.00
230	-FVF-	

Share	8	Book Value
500 2,525 3,000 1,000 1,000 34 300 1,000 30	Standard Oil Co. of California Standard Oil Co. of Indiana Standard Oil Co. of New Jersey Texas Corp. Texas Gulf Sulphur Co. Timken Roller Bearing Co. Towne Securities Corp. Underwood-Elliott-Fisher Co. Union Carbide and Carbon Corp. United States Steel Corp. F. W. Woolworth Co.	\$16,225.00 15,293.75 133,540.37 155,097.51 32,660.00 64,275.00 20.00 26,360.00 79,597.50 1,980.00 16,600.00
	Common Stocks	
	SCHEDULE IV—INSURANCE	
	SCHEDULE IV—INSURANCE	
2,000 721 1,500	American Re-Insurance Co. Continental Insurance Co. Fidelity-Phenix Fire Insurance Co. Insurance Co. of North America. Merchants Fire Assurance Co.	\$110,815.52 80,545.30 30,576.17 112,219 86 58,025.00
		\$392,181.85
	Common Stocks	
	SCHEDULE V—BANKS	
750 100 20 200 500	Bank of New York. Chase National Bank. Chemical Bank and Trust Co. First National Bank of the City of New York. Guaranty Trust Co. Lincoln Alliance Bank and Trust Co. (Rochester, N. Y.) 4% Cum. Conv. Pfd. United States Trust Co. of New York.	\$126,374.11 26,380.00 6,119.50 36,354.00 65,300.00 25,840.00 47,163.40
		\$333,531.01
	Common Stocks	
	SCHEDULE VI—MISCELLANEOUS	
40 10 4 200 225 110 93 200 100	Burlington Gas Light Co. Capitol Building Co. City Housing Corp. Clinton Hall Association and Mercantile Library Ferro-Nil Corp. Huron Mineral Land Co. Lawyers Mortgage Co. 657 Lexington Ave. Corp. Maple Leaf Mining and Development Co. New Brunswick Ry. Co. New York Historical Society.	\$1.00 3,900.00 400.00 4.00 1.00 1.00 3,570.00 1.00 5,127.87 1.00

Shares  1 New York Society Library. 13 Norfolk Country Club Realty Corp. 135 Rolfe Coal Mining Co 400 Tropical Fruit Growers Association. 60 35 Worth St. Corp 18 Yuruari Development and Gold Dredging Co	Book Value \$1.00 1.00 1,687.50 1.00 1.00 1.00
Miscellaneous	
Agreement with Greenberg, Publisher, Inc. Agreements with Macmillan Co. Agreement with Charles Scribner's Sons. Agreement with D. Van Nostrand Co. Contract with Westinghouse Electric and Manufacturing Co. Stock in Affiliated Corporations. Warrants to Purchase 22 Shares of Consolidation Coal Co. of Maryland Common Stock.	\$1.00 3.00 1.00 1.00 1.00 500.00 6,313.32
Bonds and Mortgages	
Adam Mott Lane, Great Neck, Long Island, at 5%, due 1941 (% interest in \$20,000 Mortgage).  Amsterdam Avenue and 167th Street, New York, at 5½%, Open Mortgage.  2479-2491 Amsterdam Avenue, New York, at 5%, Open Mortgage.  32 Ashland Place, Brooklyn, at 5½%, Open Mortgage.  Southwest Corner Bailey Avenue and 230th Street, Bronx, at 6%, Open Mortgage.  1637 Bathgate Avenue, Bronx, at 6%, Open Mortgage (½ interest in \$9,000. Mortgage).  172 Beaumont Street, Manhattan Beach, Brooklyn, at 6%, Open Mortgage 26-28 Beaver Street, New York, at 5%, due 1943.  188 Bowery, New York, at 4%, Open Mortgage.  102 Brighton 11th Street, Brooklyn, at 5%, due 1942 (% interest in \$4,925 Mortgage).  1218-1228 Broadway, New York, at 4%, Open Mortgage.  2762 Claffin Avenue, Bronx, at 5%, Open Mortgage.  2762 Claffin Avenue, Bronx, at 5%, Open Mortgage.  2762 Claremont Avenue, Bronx, at 5%, Open Mortgage.  25 Claremont Avenue, New York, at 4½%, Open Mortgage.  2819 Clarendon Road, Brooklyn, at 6%, Open Mortgage.  2819 Clarendon Road, Brooklyn, at 6%, Open Mortgage.  Southwest Corner College Avenue and East 170th Street, Bronx, at 6%, Open Mortgage.	\$13,333.34 59,450.00 59,550.00 4,500.00 115,000.00 3,000.00 319,000.00 60,000.00 3,283.34 475.000.00 572,500.00 3,333.33 244,375.00 4,000.00 223,589.37
Open Mortgage.  203-5 Crescent Street, Long Island City, at 5 ½%, Open Mortgage.  2080 Dean Street, Brooklyn, at 5%, Open Mortgage.  4667 Delafield Avenue, Riverdale, New York, at 5%, due 1943.  2921-2929 Ditmars Boulevard, Astoria. Long Island, at 5%, due 1943.  49-51 Duane Street, New York, at 4½% due 1942.  East Side Eleventh Avenue, between 18th and 19th Streets, New York, at 5%, Open Mortgage.  5021 Eleventh Avenue, Brooklyn, at 6%, Open Mortgage.  890 Faile Street, Bronx, at 4%, Open Mortgage.	223,389,37 17,500.00 5,500.00 12,800.00 64,350.00 125,000.00 307,322.04 5,000.00 6,000.00

	Book Value
95-30 Farragut Road, Brooklyn, at 6%, Open Mortgage (\$4,500. Mortgage)	\$3,500.00
6016 Fifteenth Avenue, Brooklyn, at 5%, Open Mortgage	4,000.00
Northeast Corner First Avenue and 89th Street, New York, at 21/2%,	-,
Open Mortgage	316,500.00
131-145 Flatbush Avenue, Brooklyn, at $5\frac{1}{2}\%$ , Open Mortgage	190,000.00
171-63 Forty-sixth Avenue, Flushing, New York, at 5%, Open Mortgage	6,500.00
171-67 Forty-sixth Avenue, Flushing, New York, at 5%, Open Mortgage	6,500.00
2440 Gilmore Street, Elmhurst, Long Island, at 5%, Open Mortgage	3,500.00
98-102 Gold Street, New York, at 4%, due 1944	300,000.00
10 Gouverneur Lane, New York, at 5%, Open Mortgage	3,950.00
due 1941	160,000.00
644-654 Greenwich Street and 111-115 Barrow Street, New York, at 41/2%,	
due 1948	129,525.00
Property at Hague, Warren County, New York, at 5%, due 1942	2,500.00
1010 Hopkinson Avenue, Brooklyn, at 6%, Open Mortgage	1,300.00
Mortgage	6,000.00
Jericho Turnpike and Park Place, Floral Park, Long Island, at 6%, due	,
1941 (27/560 interest in \$135,800. Mortgage)	6,547.50
394 Kingston Avenue, Brooklyn, at 4½%, Open Mortgage	10,000.00
34 Laight Street and 13 Vestry Street, New York, at 5%, Open Mortgage.	45,000.00
1204 Lexington Avenue, New York, at $4\frac{1}{2}\%$ , due $1943$	30,000.00
1940 Lexington Avenue, New York, at 5%, due 1940 (1/3 interest in	
\$5,820. Mortgage)	1,940.00
800 Madison Avenue, New York, at 5%, Open Mortgage	358,200.00
1473 Madison Avenue, New York, at 4%, Open Mortgage (1/3 interest in	
\$15,000. Mortgage)	5,000.00
1988 Madison Avenue, New York, at 51/2%, Open Mortgage (1/3 interest in	0.000.07
\$8,000. Mortgage)	2,666.67
East Side of Main Street, Flushing, Long Island, at 5½%, Open Mortgage	4,375.00
(¼ interest in \$17,500. Mortgage)	5,500.00
1723 Matthews Avenue, Bronx, at 5%, Open Mortgage	2,800.00
Property at Middletown, Delaware County, New York, at 5%, Open Mort-	2,000.00
gage	1,200.00
Property at Middletown, Delaware County, New York, at 5%, Open Mort-	
gage	3,500.00
365 Milford Street, Brooklyn, at 5%, Open Mortgage (1/3 interest in	
\$8,000. Mortgage)	2,666.66
170 Minna Street, Brooklyn, at 5%, due 1941 (3/3 interest in \$6,650.	
Mortgage)	4,433.33
88-90 Murray Street, New York, at 5%, due 1941	15,000.00
1308 Avenue N, Brooklyn, at 3½%, Open Mortgage	12,500.00
126-136 Nassau Street, New York, at 4½%, due 1942	250,000.00
136 Newark Avenue, Jersey City, N. J., at 4%, Open Mortgage	49,000.00
373 New Lots Avenue, Brooklyn, at 6%, Open Mortgage (1/4 interest in	3,125.00
\$12,500. Mortgage)	0,120.00
4½%, Open Mortgage (½ interest in \$18,000. Mortgage)	9,000.00
Southwest Corner Pinehurst Avenue and 176th Street, New York, at 5%,	2,000.00
Open Mortgage	209,757.57
401 Powell Street, Brooklyn, at 5%, Open Mortgage (1/3 interest in	
\$3,750. Mortgage)	1,250.00
Northeast Corner Riverside Drive and Payson Avenue, New York, at 4%,	
Open Mortgage	287,636.83

	Book Value
318 Rochester Avenue, Brooklyn, at 6%, Open Mortgage (24 interest in	
\$87,500. Mortgage)	\$58,333,33
25-31 Rose Street, New York, at 5%, Open Mortgage	105,000.00
\$9,500. Mortgage)	3,166.67
Mortgage)	3,166.67
439 Sackman Street, Brooklyn, at 5%, Open Mortgage	4,250.00
948 Schenectady Avenue, Brooklyn, at 5%, Open Mortgage	3,000.00
361-3 Seventh Avenue, New York, at 5½%, Open Mortgage	499,352.99
6%, Open Mortgage (½ interest in \$8,000. Mortgage)	4,000.00
\$7,900. Mortgage)	5,266.67
Long Island, at $5\%$ , due 1941 ( $\frac{2}{3}$ interest in \$24,000. Mortgage).,	16,000.00
28 South Street, New York, at 5½%, Open Mortgage	25,000.00
Open Mortgage (9 100 interest in \$99,000. Mortgage)	8,910.00
Mortgage	971,548.43
289-91 Third Avenue and 205-15 East 22nd Street, New York, at 5%, Open	
Mortgage	230,000.00
1261-5 Third Avenue, New York, at 4½%, due 1943	75,000.00
\$28,500. Mortgage)	9,500.00
780-6 Twelfth Avenue, New York, at 5½%, Open Mortgage	225,000.00
(¾ interest in \$6,500. Mortgage)	4,333.33
Mortgage)	1,083.33
771-5 Washington Street, New York, at 51/2%, Open Mortgage	82,000.00
40 Washington Square South, New York, at 51/2%, Open Mortgage	57,314.77
2208 Avenue X, Brooklyn, at 5%, Open Mortgage	5,000.00
523 East 5th Street, Brooklyn, at 4½%, Open Mortgage	8,000.00
745-7 East 6th Street, New York, at 5½%, Open Mortgage	30,300.00
Mortgage)	2,000.00
1025 East 10th Street, Brooklyn, at 5½%, Open Mortgage	6,000.00
\$7,000. Mortgage). 175-9 16th Street, Brooklyn, at 5%, Open Mortgage (¾ interest in \$25,000.	2,333 33
Mortgage)	16,666.67
1566 East 17th Street, Brooklyn, at 5½%, Open Mortgage	8,000.00
139-49 West 19th Street, New York, at 5½%, Open Mortgage	114,000.00 17,250.00
522-8 West 21st Street, New York, at 5%, due 1941	
1942	73,250.00
Avenue, New York, at 4½%, Open Mortgage	305,000.00
153-61 East 24th Street and 150-8 East 25th Street, New York, at 5%, due	295,000.00
1943	295,000.00
6-8 West 32nd Street, New York, at 5½%, Open Mortgage	350,000.00
2770 West 33rd Street, Brooklyn, at 5%, Open Mortgage	7,000.00
141-5 West 36th Street, New York, at $4\frac{1}{2}\%$ , Open Mortgage	622,562.21
323-7 West 38th Street, New York, at 4%, Open Mortgage	430,000.00

	Book Value
1237-51 38th Street, Brooklyn, at 5%, Open Mortgage	\$7,125.00
18 East 41st Street, New York, at 4 3 4 %, due 1944	190,000.00
320-2 West 42nd Street and 323 West 41st Street, New York, at 5%, due	,
1941	57,000.00
16-18 West 46th Street, New York, at 5%, due 1943	122,500.00
\$30,000. Mortgage)	10,000.00
530-2 West 47th Street, New York, at 5%, Open Mortgage	45,000.00
408-18 East 48th Street, New York, at 6%, Open Mortgage	67,000 00
553 West 51st Street, New York, at 6%, Open Mortgage	14,000.00
Mortgage)	5,000.00
154-6 East 53rd Street, New York, at 51/2%, Open Mortgage	130,000.00
243-9 West 67th Street and 248-50 West 68th Street, New York, at $4\frac{1}{2}\%$ ,	
due 1941	248,220.52
40-39 73rd Street, Jackson Heights, Long Island, at 5%, Open Mortgage	7,000.00
41-32 74th Street, Elmhurst, Long Island, at 5%, due 1941	8,500.00
417 East 78th Street, New York, at $4\frac{1}{2}\%$ , due 1944 ( $\frac{1}{2}$ interest in \$12,000.	C 000 00
Mortgage)	6,000.00 4,000.00
309-27 East 94th Street, New York, at 5%, due 1943	253,000.00
570 East 94th Street, Brooklyn, at 6%, Open Mortgage (% interest in	233,000.00
\$7,000. Mortgage)	4,666.67
123 East 114th Street, New York, at 6%, Open Mortgage (\$4,000. Mort-	.,
gage)	3,000.00
542 West 114th Street, New York, at 5%, Open Mortgage	12,000.00
89-32 116th Street, Richmond Hill, Long Island, at $5\frac{1}{2}\%$ , Open Mortgage. 107-17 118th Street, Richmond Hill, Long Island, at $5\frac{1}{2}\%$ , Open Mort-	3,000.00
gage	3,500.00
107-23 118th Street, Richmond Hill, Long Island, at $6\%$ , Open Mortgage	3,500.00
58 East 120th Street, New York, at 6%, Open Mortgage	16,000.00
145 West 123rd Street, New York, at 5½%, Open Mortgage (⅓ interest in \$9,000. Mortgage)	3,000.00
500 West 132nd Street, New York, at 3%, Open Mortgage (1/3 interest in	0,000.00
\$33,000. Mortgage)	11,000.00
Northeast Corner 134th Street and Riverside Drive, New York, at 5%,	
Open Mortgage	296,862.33
614-20 West 153rd Street, New York, at $5\frac{1}{2}\%$ , Open Mortgage	83,500.00
558 East 158th Street and 774 Hegney Place, Bronx, at 4%, Open Mort-	8,000.00
gage (½ interest in \$16,000. Mortgage)	8,000.00
Mortgage)	12,500.00
83 West 174th Street, Bronx, at 4%, Open Mortgage	9,150.00
85 West 174th Street, Bronx, at 6%, Open Mortgage	10,500.00
401 West 201st Street, New York, at 4 ½%, due 1941	25,000.00
51 Barclay Street, New York, at 5%. Open Mortgage	9,500.00
55-7 Barclay Street, New York, at 5%, Open Mortgage	57,500.00
61 Barclay Street, New York, at 5%, Open Mortgage	15,000.00
65-7 Barclay Street, New York, at 5%, Open Mortgage	57,000.00 24,000.00
75-9 Barclay Street, New York, at 5%, Open Mortgage	448,000.00
21 Claremont Avenue, New York, at 5%, Open Mortgage	173,250.00
29-31 Claremont Avenue, New York, at 5%, Open Mortgage	65,000.00
33-5 Claremont Avenue, New York, at 5%, Open Mortgage	150,000.00
231-5 Greenwich Street, New York, at 5%, Open Mortgage	24,500.00
237 Greenwich Street, New York, at 5%, Open Mortgage	5,500.00
239-43 Greenwich Street, New York, at 5%, Open Mortgage	24,000.00

	Book Value
252-4 Greenwich Street, New York, at 5%, Open Mortgage	\$24,000.00
253-9 Greenwich Street, New York, at 5%, Open Mortgage	54,500.00
261-7 Greenwich Street, New York, at 5%, Open Mortgage	70,000 00
70 Haven Avenue, New York, at 5%, Open Mortgage	433,500.00
70 Morningside Drive and 400 West 118th Street, New York, at 5%, Open	
Mortgage	208,500 00
38 Murray Street, New York, at 5%, Open Mortgage	23,500.00
40 Murray Street, New York, at 5%, Open Mortgage	3,200.00
42 Murray Street, New York, at 5%, Open Mortgage	3,750.00
44 Murray Street, New York, at 5%, Open Mortgage	5,000.00
46 Murray Street, New York, at 5%, Open Mortgage	7,500.00
52-4 Murray Street, New York, at 5%, Open Mortgage	14,750.00
68 Murray Street, New York, at 5%, Open Mortgage	26,000.00
70 Murray Street, New York, at 5%, Open Mortgage	10,000.00
445 Riverside Drive, New York, at 5%, Open Mortgage	66,250.00
460-1 Riverside Drive, New York, at 5%, Open Mortgage	16,500.00
26 West Broadway, New York, at 5%, Open Mortgage	12,500.00
28-30 West Broadway, New York, at 5%, Open Mortgage	39,500.00
32 West Broadway, New York, at 5%, Open Mortgage	7,500.00
40 West Broadway, New York, at 5%, Open Mortgage	20,000.00
42 West Broadway, New York, at 5%, Open Mortgage	30,000.00
44 West Broadway, New York, at 5%, Open Mortgage	26,000.00
46 West Broadway, New York, at 5%, Open Mortgage	33,500.00
48 West Broadway, New York, at 5%, Open Mortgage	9,000.00
50 West Broadway, New York, at 5%, Open Mortgage	6,300 00
52 West Broadway, New York, at 5%, Open Mortgage	15,000.00
429-447 West 59th Street, 134-170 West 60th Street and 1-15 Amsterdam	
Avenue, New York, at 5%, Open Mortgage	400,000.00
115th Street and Amsterdam Avenue, New York, at $5\%$ , Open Mortgage	100,000.00
403 West 115th Street, New York, at 5%, Open Mortgage	188,000.00
404 West 116th Street, New York, at 5%, Open Mortgage	171,500.00
420 West 116th Street, New York, at 5%. Open Mortgage	320,000.00
424-30 West 116th Street, New York, at 5%, Open Mortgage	342,000.00
430 West 118th Street, New York, at 5%, Open Mortgage	151,500.00
	\$15,711,872.90
Participation Certificates	
504 506 Proadway Now York at 207 past due	\$2.9C0.07
594-596 Broadway, New York, at 3%, past due	\$3,260.87
824-836 Broadway, Brooklyn, at 5½%, past due (Face Value \$250.)	187.50
1705 Caton Avenue, Brooklyn, at 4½%, due 1940	1,500.00
38-44 Court Street, 186 Remsen Street and 391 Fulton Street, Brooklyn,	3,430.73
at 3%, due 1940	100,000.00
2902 2917 Ditmog Avenue Procedum et 507 due 1040	410.00
2203-2217 Ditmas Avenue, Brooklyn, at 5%, due 1940         126-128 Franklin Street, New York, at 5%, past due	2,048.98
	1,083.50
South Side Grand Avenue, Maspeth, Long Island, at $5\frac{1}{2}$ %, past due  2238 Hughes Avenue, Bronx, at $5\frac{1}{2}$ %, past due	413.05
42-50 Johnson Street, Brooklyn, at $4\frac{1}{2}\%$ due 1942	236.25
2989-2997 Kenmore Place, Brooklyn, at 472% due 1542	450.45
\$1,000.)	1.00
3120-3130 Kingsbridge Avenue, Bronx, at 4½%, past due	3,299.41
427-431 Linden Boulevard, Brooklyn, at 5%, due 1939	1,228.10
483-495 Linden Boulevard, Brooklyn, at 5%, past due	22,500.00
West Side Locust Valley Road, Brookville, Long Island, at 5½%, past due	1,500.00
273-7 Madison Avenue, New York, at 3%, due 1944 (Face Value \$333.34)	1.00

	Book Value
62-70 Manhattan Avenue, Brooklyn, at $5\frac{1}{2}\%$ , past due	\$200.00
Maple and Central Avenues, Cedarhurst, Long Island, at 5%, past due	1,000.00
2975 Marion Avenue, Bronx, at 5%, due 1944	2,000.00
Northwest Corner Avenue P and West 6th Street, Brooklyn, at $4\frac{1}{2}\%$ , past	
due	11,250.00
805 Riverside Drive, New York, at 5%, past due (Face Value \$4,933.69)	4,483.69
Northwest Corner Roberts Avenue and Eastern Boulevard, Bronx, at	
5½%, past due	662.84
West Side Rochambeau Avenue near East Green Hill Road, Bronx, at 5%,	10.010.50
due 1940	19,640.76
950 St. Marks Avenue, Brooklyn, at 5½%, past due	5,000.00 235.96
343 St. Nicholas Avenue, Ridgewood, Queens, at 5%, due 1942	255.50
past due	2,433.86
Southeast Corner Sherman Avenue and Sickles Street, New York, at 41/2%,	2,100.00
due 1944.	921.15
Teasdale Place and Cauldwell Avenue, Bronx, at 43/4%, Past due	4,928.47
7410 Tenth Avenue, Brooklyn, at 6%, past due	200.00
Thayer Street and Sherman Avenue, New York, at 5%, due 1941 (Face	
Value \$12,870.)	12,480.00
1444 Third Avenue, New York, at 5%, past due	826.09
3300-3308 Third Avenue and $991-995$ Boston Road, New York, at $5%$ , due	
1940	2,500.00
118-124 Waverly Avenue, Brooklyn, at $5\frac{1}{2}\%$ , past due	100.00
620 West End Avenue, New York, at 5%, past due	600.00
858 West End Avenue, New York, at 5%, past due	1,086.94
586 East 3rd Street, Brooklyn, at 6%, past due	2,400.00
1709-1717 East 4th Street, Brooklyn, at 5%, past due	1,817.59
109-113 South 5th Street, Brooklyn. at 4 ½%, past due	900.00 294.79
972 East 14th Street, Brooklyn, at $4\frac{3}{4}\%$ , due 1942	234.13
due	980.00
31 East 21st Street, Brooklyn, at 5%, due 1940.	1,549.87
279 22nd Street, Brooklyn, at $5\frac{1}{2}\%$ , past due.	2,500.00
848 East 28th Street, Brooklyn, at 5%, past due.	1,400.00
532 West 30th Street, New York, at 6%, past due	1,500.00
850-872 East 31st Street, Brooklyn, at 5%, past due	10,250.00
228-232 East 38th Street, Brooklyn, at 4½%, due 1944	21,400.00
315-329 East 40th Street, New York, at 21/2%, past due	1,521.73
45-28 42nd Street, Long Island City, at $5\frac{1}{3}\%$ , due $1940$	1,206.25
1207 47th Street, Brooklyn, at $5\frac{1}{2}\%$ , past due	1,125.00
150-154 East 49th Street, New York, at 4 1/8%, due 1940	665.41
474 51st Street, Brooklyn, at 5%, past due	1,200.00
16-18 East 53rd Street, New York, at 4%, due 1939	4,303.81
37-32 80th Street, Jackson Heights, Long Island, at 4½%, due 1940	7,500.00
35-64 84th Street and 35-63 83rd Street, Jackson Heights, Long Island, at	6,500.00
$5\frac{1}{2}$ , due 1940	1,250.00
107-123 West 93rd Street, New York, at 5½%, past due (Face Value	1,200.00
\$1,000.)	1.00
365-369 East 193rd Street, Bronx, at 5%, due 1940	4,887.50
out to the state of the state o	

\$286,803.10

## SECURITIES SUMMARY

AT JUNE 30, 1939

Bonds	Book Value
Schedule II—Public Utility	15,711,872.90
	\$30,619,693.93
DISTRIBUTION	<del></del>
Special Endowments—Principal Special Endowments—Income. Student Loans Gifts. General Endowment	516,737.50 18,412.50 407,051.78

## UNIVERSITY LAND, BUILDINGS AND EQUIPMENT

	At June 30, 1938	Additions 1938-1939		Deductions 1938–1939	At June	At June 30, 1939
Land: 114th to 116th Streets, Amsterdam Ave. and Broadway.  Improvements to Grounds.	\$2,022,410.06 61,539.15				\$2,022,440.06 61,539.15	000000000000000000000000000000000000000
116th to 120th Streets, Amsterdam Ave. and Broadway  way  Improvements to Grounds.	2,000.000 00 429,601.17 2,439,601.17				2,000,000.00 429,601.17	\$2,083,979.21 9,459,601.17
116th Street, north side, Morningside Drive to Amsterdam Avenue.	563,1					563,193.40
sterdam Avenue		503,656.95	:			503,656.95
Canal.  Improvements and additions to Baker Field	736,656.65 268,905.19 1 005 561 84	:	\$1,825.00		736,656.65 270,730.19	1 000 1
Alumni House: Alterations and Equipment Avery Library Building: Construction Equipment.	13,003; 13,42 1,829,68				339,821.42	13,402.62
e Equipment  Bis ments and Furnishings  A. N. Y. Construction		26,189.41 2,551.82 2,850.98 88,306.22 12,286,52 30,010.00			315,526.06	341,651,10 56,189,41 2,554,82 2,850,98 88,306,22 12,286,52 30,040,00

	Equipment	2,009.61				265,388.90		
			582,924.57				582,924.57	
Chemical Engineering Building: Construction.  Dental and Oral Surgery: (School of)	g: Construction		3,166.44				3,166.41	
Construction and Equipment.	pment		592,200.45	1,961.80			594,162.25	
Crocker Research Building:	r Research Building: X-Bow Equipment		18 465 59				18 165 59	R
Earl Hall: Construction and Equipment	Squipment	164,945.65				164,945,65		ΕI
Trophy Room Equipment.	ent	980.00				980.00	. ()	0
			165,925.65				165,925.65	R
Engineering Building:	Construction	286,575.50				286,575.50	. 1	Т
	Equipment	50,619.31				50,619.31		
			337,194.81				337,194.81	0
Faculty House:	Construction	299,725.43				299,725.43	г	F
	Equipment	35,287.42				35,287,42		,
			335,012.85	335,012.85			335,012.85	Т
Fayerweather Hall:	Construction	362,610.91				362,610.91	11	н
	Equipment	48,497.54				48,497.54	r.	E
			411,108.45	411,108.45			411,108.45	7
Furnald Hall:	Construction	352,666.66				352,666.66	. 1	ŀ
	Equipment	34,862.97				34,862.97		F 14
			387,529.63				387,529.63	٠. ٨
Hamilton Hall:	Construction	486,572.26				186,572.26	, 5	S
	Equipment	24,156.49				24,156,49		ΙI
			510,728.75				510,728.75	R
Hartley Hall:	Construction	337,202.65				337,202.65	. г.	E
	Equipment	37,007.38				37,007.38	, 11	Н
			374,210.03				374,210.03	
Havemeyer Hall:	Construction	536,427.47				536,427,47		
	Equipment	114,730.67		11,469.00		126,199.67		
			651,158.14				662,627.14	
	_	_	_	-	_	-	1	1

		At June 30, 1938	1938	Additions 1938-1939	Deductions 1938-1939	At June 30, 1939	80, 1939
Havemeyer Hall Annex: (Chandler Laboratory)	Construction Equipment.	\$781,108.11 218,641.87	000	\$600.00		\$781,108.11 219,241.87	91 000 940 00
John Jay Hall:	Construction	1,662,295.39 141,860.39 64,294.14	\$999,749,98	3,130.54		1,662,295.39 141,860.39 67,424.68	\$1,000,045.95 1,001,000,000,000
Johnson Hall:	Construction Equipment	1,145,942.25 90,473.72 33,683.35	1,868,449,92	2,219.24		1,145,942.25 90,473.72 35,902.59	1,8/1,980.40
Kent Hall:	Construction	1, 588,704.91 1,164.50	1,270,099.32			588,704.91 1,164.50	1,272,318.56
Library Building:	Construction	1,108,461.08 103,038.31 46,600.00	589,869.41			1,108,461.08 103,038.31 46,600.00	089,869.41
Livingston Hall:	Construction	333,607.50 32,106.83				333,607.50 32,106.83	1,208,039.39
Philosophy Building: Physics Building: (Pupin Physics Laboratory)	Construction & Equipment Construction	1,282,809.17	352,574.38			1,282,809.17	352,574.38
(Rutherford Observatory) President's House:	ConstructionFurnishing					196,830.82	1,550,859.70
St. Paul's Chapel:	Construction	266,676.54 57,090.62	221,240.99 323,767.16	26,739.30	26,739.30	266,676,54	350,506.46

		R E	ORT	OF	T HE T	REASURER 113
603 941 95	198 090 84	1 076 499 33	577.177.83	334,855,32	3,595,355.04	1,733,723,40 34,621,72 24,789,89 24,789,89 45,225,25 31,333,33 22,833,00 37,712,65 23,943,65 21,691,88 2,000,00 4,600,00
485,292.87 117,948.38	942,850.82 255,240.02	1,005,957.47	534,863.38	309,817.97 25,037.35	988,431.53 31,474.20 647,547.64 23,120.80	07.6E119
					00.009	
6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	70000001	1,130,030.04	577 177 83	334 855 32	3,594,755.04	1,733,723,40 34,624,72 24,789,89 24,789,89 24,789,89 15,22,23 31,313,33 37,712,65 23,943,60 2,000,00 4,600,00
485,292.87 117,948.38	942,850.82 255,240.02	1,005,957.47 70,534.86	534,863.38 42,314.45	309,817.97 25,037.35	988,431.53 31,474.20 647,547.64 23,120.80	48,149,23
Construction	Construction	Construction	Construction Equipment	Construction	Construction & Equipment Construction  Equipment  Power House Equipment  Power House Conduits	Gymnasium Equipment
Schermerhorn Hall:	Schermerhorn Hall Extension: Construction Equipment	School of Business:	School of Journalism:	School of Mines Building:	South Hall: University Hall:	Gymnasium Equipment  No. 411 West 117th Street (Maison Francaise)  No. 413 West 117th Street (Chaplain's Residence)  No. 415 West 117th Street (Dean's Residence—College)  No. 419 West 117th Street (Dean's Residence—Engineering)  No. 421 West 117th Street (Research)  Affairs  No. 423 West 117th Street (Deutsches Haus)  No. 429 West 117th Street (Coutsches Haus)  No. 425 West 117th Street (Casa de las Espanas)  Class of 1880 Gates  Class of 1881 Flagstaff

	At June 30, 1938	), 1938	Additions 1938–1939	Deductions 1938–1939	At June 30, 1939	), 1939
Class of 1883 Mines—Setting Bust of Professor Egleston		\$390.00				\$390.00
Class of 1885 Sun-Dial		10,000.00				10,000.00
Class of 1886 Granite Exedra		5,000.00				5,000.00
Class of 1888 Gates		2,000.00				2,000.00
Class of 1889 Mines "Hammerman"		5,000.00				5,000.00
Class of 1890 Arts and Mines-Statue of Letters and pylon .		8,598.72				8,598.72
Class of 1891 Gates		15,000.00				15,000.00
Class of 1897 Boat House		8,000.00				8,000.00
Class of 1893 Chapel Bell		5,114.81				5,114.84
Class of 1900 Statue of Science and pylon		13,148.95				13,148.95
Class of 1906 Clock		1,159.16				1,159.16
Fountain of the God Pan		12,013.50				12,013.50
Granite Posts for Class of 1891 Gates		2,563.00				2,563.00
Hamilton Statue.		10,900.00				10,900.00
Huntington Portrait		2,052.00				2,052.00
Lighting University Grounds		1,035.00				1,035.00
Portrait of President Butler		9,880.57				9,880.57
Seth Low Memorial Tablet		1,010.00				1,010.00
Marcellus Hartley Research Tablet		417.00				417.00
John B. Pine Tablet		1,374.00				1,374.00
Munroe Smith Tablet		1,840.00				1,840.00
Van Amringe Memorial		20,738.34				20,738.34
Hegeler Furnace		2,000.00				2,000.00
Model of Coal Mine		250.00				250.00
Braden Mine Models		1,700.00				1,700.00
Installation of Cross Connected Fire Mains		17,912.57				17,912.57
Animal Accommodations		1,842.49			:	1,842.49
South Court Fountains		4,932.88				4,932.88
Botany and Agricultural Greenhouses		16,486.50				16,486.50
Optical Instruments		7,100.00				7,100.00

E 27.274.84 O 107.1140.39	T OF THE TREASURER	9,933,050.89
\$2,579.90 749.25 8,168.98 2,882.77 38,033.59 4,814.55 45.80	37,316,10 628,969,31 33,896,20 1,400,00 11,938,07 39,081,92 39,263,14 721,075,50 513,488,01 9,068,47 1,721,020,08 41,201,90 4,345,951,64 76,990,10	750,000.00
	\$12,987.00 \$1,900.00 1,569.20 40,812.02	
57,274.84 107,140.39	67,699.19	9,901,756.67
\$2.579.90 749.25 8.168.98 2.882.77 38.033.59 4.814.55 4.814.50	628,969,31 33,896,20 1,400,00 1,4938,07 39,9263,14 737,062,50 513,488,01 9,068,47 1,719,129,08 42,635,70 76,550,10 630,728,55	750,000.00
Assessments: Boulevard Sewer. Boulevard Sewer.  129th Street Sewer. Opening and acquiring title to Addition to Riverside Park. Opening 116th Street. Opening 120th Street. Opening Riverside Drive and Parkway On 116th Street for Inwood Park.	Medical School: (59th Street) Buildings Buildings Equipment Library Roof Laboratory School of Dentistry School of Dentistry School: (168th Street) New Site—168th Street—Land New Residence Hall Site Improvements to New Site Bard Hall Construction and Equipment New Buildings New Buildings New Buildings New Buildings School of Dental and Oral Surgery School of Dental and Vanderbilt Clinic Buildings and	Equipment

	At June	At June 30, 1938	Additions 1938–1939	Deductions 1938-1939	At June	At June 30, 1939
Camp Columbia, Morris, Conn				\$55,307.69 1.00		\$55,307.69 1.00
Less Reserve for Depreciation of Dining Halls Equipment. Less Reserve for St. Paul's Chapel. Less Reserve for John Jay Hall Less Reserve for Kent Hall Less Reserve for Chandler Laboratory. Less Reserve for Medical Center	\$57,776.32 29.00 100.00 74.91 323.00	\$40,0	\$92,826.10 \$12,987.00	73,843.59     \$92,826.10     \$12,987.00       58,303.23     \$12,987.00	\$57,848.41 29.00 100.00 74.91 8.24 25.72	\$40,153,682.69
		\$40,015,540.36				\$40,095,596.41

## RENTAL PROPERTY

	At June 30, 1938 (Net)	Increase and Charges to Depreciation Reserve	Decrease and Depreciation	At June 30, 1939 (Net)
GENERAL FUNDS UPPER ESTATE AT 1935 ASSESSED VALUATIONLand \$ LOWER ESTATE AT 1935 ASSESSED VALUATIONLand	Land \$28,230,310.76			\$28,230,310.76
·	\$30,624,310.76			\$30,624,310.76
Amsterdam Avenue and 115th Street.  47-9 Barclay Street.  51 Barclay Street.  52 Barclay Street.  53 Barclay Street.  63 Barclay Street.  64 Barclay Street.  65 Barclay Street.  66 Barclay Street.  67 Barclay Street.  68 Barclay Street.  69 Barclay Street.  69 Barclay Street.  69 Barclay Street.  61 Building  62 Barclay Street.  8 Building  63 Barclay Street.  8 Building  64 Building  65 Barclay Street.  8 Building  65 Barclay Street.  8 Building  66 Building  67 Barclay Street.  8 Building  68 Barclay Street.  8 Building  69 Building  60 Building  60 Building  60 Building  60 Building  61 Barclay Street.  62 Building and Lease  63 Barclay Street.  8 Building  64 Building  65 Barclay Street.  8 Building  66 Building and Lease	\$108,445.79 13,024.87 11,281.48 37,260.74 58,053.48 15,559.37 67,247.95 22,7722.40 35,355.16 1.00 711,279.51 26,731.64 2,697.01 388,991.47 6,248.00 425,123.78 27,446.13 5,686.20	08,445.79 13,024.87 13,024.87 14,1281.48 15,550.74 15,559.37 18,101.60 17,247.95 18,101.60 11,279.51 11,279.51 11,279.51 11,279.51 11,279.51 2,687.01 88,991.47 5,686.20 24,185.16	\$ 175.27 2.859.02 5.304.16 13,949.00	\$108,445.79 \$12,519.60 17,281.48 37,260.74 59,553.48 15,559.37 18,101.60 54,388.93 22,722.40 35,355.16 728,283.85 261,447.48 2,697.01 375,045.47 6,248.00 425,123.78 5,686.20 5,686.20 2,686.20

	At June 30, 1938 (Net)	Increase and Charges to Depreciation Reserve	Decrease and Depreciation	At June 30, 1939 (Net)
245-47 Greenwich Street.       Building and Lease         252-4 Greenwich Street.       Building         253-9 Greenwich Street.       Building and Lease         70 Haven Avenue.       Building and Lease         38 Murray Street.       Building and Lease         44 Murray Street.       Building and Lease         45 Murray Street.       Building and Lease         48 Murray Street.       Building and Lease         52-4 Murray Street.       Building and Lease         52-4 Murray Street.       Building and Lease         52-4 Murray Street.       Building and Lease         65 Murray Street.       Building         70 Murray Street.       Building         71 Murray Street.       Building         72 Murray Street.       Building         73 Murray Street.       Building         74 Street broadway.       Building         26 West Broadway.       Building         27 Murray Street.       Building         28 West Broadway.       Building         29 West Broadway.       Building         20 West Broadway.       Bu	\$2.277.45 24.178.70 57.042.45 770.082.21 439.090.46 23.579.70 3,463.02 4,053.89 5,896.33 7,806.88 5,090.35 10.094.04 10.094.04 3,361.56 211.485.99 431.885.99 440.45 12.1988.00 40.045.22 7,598.00 40.045.22 7,598.00 40.045.22	\$1,500.00 751.00 696.12	\$2,318.88 475.01 240.12 10.453.80 29,624.38	\$2.277.45 24.178.70 54.723.57 70,082.21 439,090.46 23,779.70 4,053.89 5.896.83 7.805.88 4,615.34 1,501.00 11,503.56 15,240.45 26,585.57 10,094.09 3,121.44 231,082.19 452,212.20 12,598.00 12,598.00 12,598.00 12,598.00 12,598.00 12,698.15 7,594.15
west Droadway. West Broadway. West Broadway. West Broadway.	26,273.84 33,375.62 9,089.15 6,630.68			26,273.84 33,375.62 9,089.15 6,630.68

15,115,25 176,079,96 61,750,72 129,680,03 204,199,32 18,892,635 15,635,65 370,829,43 372,268,70 140,51 140,51 19,78,110 381,01 19,78,110 19,78,110 381,01 19,398,93 9,165,99 5,606,53 737,403,50	\$39,553.06 \$100,209.61 \$6,402,202.29 \$39,553.06 \$100,209.61 \$37,026,513.05	\$1.00	\$1.00 17.918.38 296.00 1.00 17.825.40 \$1.00 17.825.40	\$66,011.78 \$62.81 \$5,184.45
15,115,25 176,395,55 61,750,72 129,680,03 204,199,32 188,926,35 386,465,08 372,268,70 22,307,97 19,527 19,779,94 19,779,94	\$6.462,858.84 \$39,5 \$37,087,169.60 \$39,5	\$1.00	2.71	\$36,0
18 East 16th Street.       Land and Building         41 West 16th Street.       Land and Building         524 East 73rd Street.       Land and Building         403 West 118th Street.       Land and Building         404 West 116th Street.       Land and Building         424-30 West 116th Street.       Land and Building         405 West 117th Street.       Land and Building         431 West 117th Street.       Land and Building         431 West 117th Street.       Land and Building         431 West 117th Street.       Land and Building         432 West 118th Street.       Land and Building         433 West 118th Street.       Land and Building         430 West 118th Street.       Land and Building         117th Street.       Land and Building         117th Street.       Land and Building         117th Street.       Land and Building	Total General Funds.	SPECIAL FUNDS Annonymous Endowment: Norfolk, Connecticut	Cardozo (Benjamin N.) Endowment: 1177-32 106th Road, Jamaica, N. Y. 234 Rivington Street. 376 Sterling Place, Brooklyn. 226 Calhoun Avenue, Bronx. Land and Building Place and Building Place and Building Place and Building Place Bast 7th Street.	Delafield Endowment: 1779 West 6th Street, Brooklyn

	At June 30, 1938 (Net)	Increase and Charges to Depreciation Reserve	Decrease and Depreciation	At June 30, 1939 (Net)
171 East 107th StreetLand and Building	\$10,871.38	\$1,849.34		\$12,720.72
	\$15,993.02	\$1,912.15		\$17,905.17
Eno (Amos F.) Endowment: 1556-60 Broadway	\$1 115 920 00			61 118 690 00
1680-8 BroadwayLand and Building	1,549,199.64			1,549,199.64
1630-8 BroadwayEquipment	33,906.12			33,906.12
Broadway, 68th Street, Amsterdam Avenue and 69th StreetLand and Building	369,810.00			369,810.00 $1.111.494.45$
13-15 Coenties Slip	44,100.00			44,100.00
27 Coenties SlipLand and Building	22,335 00			22,335.00
34 Front StreetLand and Building	24,610.00			24,610.00
:	28,955.00			28,955.00
36 Front StreetLand and Building	26,670.00			26,670.00
MacDougal Street, Washington Square South, Sullivan Street and	34,178.30	\$1,090.00		35,268.30
West 3rd StreetLand and Building	357,553.90			357,553.90
5-7 Mercer Street	56,300.00			56,300.00
133 Roosevelt Street and 293 Front Street	38,738.13	358.17		39,096.30
	45,480.00			45,480.00
	68,176.37	89.39		68,265.76
Land	59,480.00			59,480.00
Sout	1,000.00			1,000.00
426-8 West BroadwayLand and Building	112,651.34			112,651.34
427-9-31 West BroadwayLand and Building	82,286.00	1,200.00		83,486.00
430 West BroadwayLand and Building	10,525.00	:		10,525.00
432 West BroadwayLand and Building	9,966.00	9,966.00		9,966.00

434 West Broadway.  434 ½ West Broadway.  Land and Building 456 West Broadway.  Land and Building 474-6-8 West Broadway.  Land and Building 13-15 West 60th Street.  Land and Building 44 West 64th Street.  Land and Building	9,715.00 19,215.00 11,929.94 136,977.18 196,462.86 52,383.56 54,022.24	497.04		9,715.00 19,215.00 11,929.94 136,977.18 196,959.90 52,383.56 54,022.24
	\$5,684,041.03	\$3,234.60		\$5,687,275.63
iths Endowment: Advances on Property in Process of Aequisition		\$2.96		\$2.96
ningway Endowment: 237 Grand Street, Jersey City, New JerseyLand and Building 51 Market Street.	\$6,666.26 21,610.17	\$260.00	\$260.00	\$6,926.26 21,610.17
	\$28,276.43	\$260.00		\$28,536.43
ett Endowment: 285 East 40th Street, Brooklyn (3/11 interest)Land and Building	\$899.57		\$25.72	\$873.85
nedy Endowment: 9 Brookwold Avenue, Baldwin, Long Island (¼ interest)Land and Building 1002 Foster Avenue, Brooklyn (19/92 Interest)Land and Building 31-73 31st Street, Astoria, Long Island (¼ interest)Land and Building 35-16 87th Street, Jackson Heights, New York (¼ Interest)Land and Building	\$1,756.8:1 74,447.60 3,706.29 3,818.93		\$1,756.84	\$74,147.60 3,706.29 3,818.93
	\$83,729.66		\$1,756.84	\$81.972.82
hym Endowment: 1354 College Avenue, Bronx (½ Interest)	\$1,644.98 1.00 1.00	\$1,644.98 1.00 1.00		\$1,644.98 1.00 1.00

	At June 30, 1938 (Net)	Increase and Charges to Depreciation Reserve	Decrease and Depreciation	At June 30, 1939 (Net)
2046 Second Avenue (1,5 Interest)	\$1.00 7,323.65 1.00 1.00			\$1.00 7,323.65 1.00 1.00
	\$8,973.63			\$8,973.63
Pell (Mary B.) Endowment: 837 60th Street, Brooklyn (35 interest)		\$40,000.00		\$:40,000.00
Phillips Endowment: Englewood, New Jersey. Land Highland Falls, New York. Teaneck, New Jersey. Land Teaneck, New Jersey. Land Teaneck, New Jersey. Land 55 West 90th Street (Remainder Interest).	\$2,700.00 10,000.00 1,100.00 14,259.00		\$550.00	\$2,700.00 9,450.00 1,100.00 14,259.00
	\$28,059.00		\$550.00	\$27,509.00
Phoenix Endowment: 92 First Avenue. 94 First Avenue. 176 Madison Avenue. 1841 East 5th Street. 21 East 33rd Street. 1841 East 33rd Street. 185 East 33rd Street. 186 East 38rd Street. 187 East 38rd Street. 188 East 38rd Street. 188 East 38rd Street.	\$25,029.15 16,982.88 215,500.00 15,799.71 113,750.00		\$231.07	\$25,029.15 16,751.81 215,500.00 15,799.71 113,750.00
	\$387,061.74		\$231.07	\$386,830.67
	_	_	_	

Randolph Bequest:  868 East 162nd Street, Bronx (½ Interest)	\$16,418.04		\$16,418 04	\$2,485.23
	\$18,903.27		\$16,118.01	\$2,485.23
Special Endowments (Unallocated)       362-70 Avenue "A"         506-28 Cherry Street       Land         636 Fighth Avenue       Land and Building         812 Fighth Avenue       Land and Building         106-28 Fulton Street       Land and Building         106-27 Macombs Place       Land and Building         450 Riverside Drive       Land and Building         15-19 East 30th Street       Land and Building         15-21 West 36th Street       Land and Building         15-21 West 35th Street       Land and Building         40-2 West 35th Street       Land and Building         40-2 West 37th Street       Land and Building         51-31 West 43rd Street       Land and Building         52-4 East 81st Street       Land and Building         52-4 East 81st Street       Land and Building         52-4 East 81st Street       Land and Building	\$127,014.86 99,189,19 210,815.81 97,080.88 411,5080.88 411,508.88 125,196.28 228,679.93 102,281.57 217,914.02 318,175,13 672,801.02 77,917,01		\$99,189.19 2,444.14 159.50 209.40	\$127,011.86 210,815.81 97,080.88 441,508.42 65,127.30 125,196.28 296,323.97 158,611.68 298,679.93 102,281.57 316,329.83 141,030.30 312,965.53 672,801.02
	\$3,731,191.16		\$102,002.73	\$3,632,188.43
Total Special Funds	\$9,990,129.51	\$81,451,49	\$120,984.40	\$9,950,596.60
Total of General and Special Funds Rental Property	\$47,077,299.11	\$121,004.55	\$221,194.01	\$221,194.01 \$46,977,109.65

## SPECIAL ENDOWMENTS

	At June 30, 1938	Additions 1938–1939	At June 30, 1939
(A) For General Purposes			
ALTSCHUL (BENJAMIN) FUND:  Bequest of Benjamin Altschul, the income and, after twenty-five years, the principal may be used for any purpose of the University. Established 1933	\$2,887.44		\$2,887.44
BURGESS (JOHN W.) FUND: Gift of Anonymous Donors to the general endowment of the University. Established 1910	100,000.00	:	100,000.00
CARPENTIER (H. W.) ENDOWMENT FUND: Legacy of the late Horace W. Carpentier, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1918	1,320,000.00		1,320,000.00
CIVIL ENGINEERING FIRE TESTING STATION FUND: Created by act of the Trustees on October 6, 1930, by the transfer of the sum of \$7,435.97 from the unexpended balance on June 30, 1930, of receipts from the Civil Engineering Fire Testing Station, this sum to be set up as the Civil Engineering Fire Testing Station, to be used as the Trustees may from time to time determine for the support and development of the work of this station. Established 1930.	13,000.00		13,000.00
CIVIL ENGINEERING TESTING LABORATORIES FUND:  Created by act of the Trustees on January 5, 1925, by the transfer of the sum of \$10,000 from the unexpended balance on June 30, 1924, of receipts from the Civil Engineering Testing Laboratories, this sum to be set up as a Civil Engineering Testing Laboratories Fund, the income or principal of which shall be used as the Trustees may from time to time determine for the support and development of the work of these laboratories. Established 1925	24,942.77	\$2,413.28	27,356.05

I·		EPOR!	r of th	E TR	EASU I	RER	oc I	
8,255.00	17,000.00	3,501.62	128,800.00	7,875,314.11	2,592,756.43		610,403.48	
90.00					3,959.81 (Deergase)		173,574.90	
8,165.00	17,000.00	3,501.62	128,800.00	7,875,314.11	2,596,716.24		436,828.58	
Ciff of the Class of 1897, in commemoration of the fortieth anniversary of their granuation, the rise come to be used for the general purposes of the University. Established 1937	CLASS OF 1902 FUND: Gift of the Class of 1902 College, the income to be used for the general purposes of the University. Established 1928.	GLASS OF 1912 COLLEGE, ENGINEERING AND ARCHITECTURE FUND: Gift of the Class of 1912, in commemoration of the twenty-lifth anniversary of their graduation, the income to be used for the general purposes of the University. Established 1937	COLUMBIA UNIVERSITY PERMANENT ALUMNI FUND: Inaugurated by a gift of \$10,000.00 from the Class of 1895 Arts and Mines and subsequently increased by gifts from the Alumni Federation of Columbia University, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1919.	GNO (AMOS F.) ENDOWMENT PUND:  Bequest of the late Amos F. Bno, the principal and income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1923	KENNEDY (JOHN STEWART) ENDOWMENT FUND:  Bequest of the late John Stewart Kennedy, a Trustee of Columbia University 1903 to 1909. Established 1910.	KILLOUGH (W. H. D.) FUNDS: Bequest of the late Walter H. D. Killough, for the general endowment of the University. (Principal held by the Trustees under the Will.) Established 1930.	PELL (MARY B.) FUND: Bequest of the late Mary B. Pell, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1914	

	At June 30, 1938	Additions 1938-1939	At June 30, 1939
VAN CORTLANDT (ROBERT B.) FUND:  Bequest of the late Robert B. Van Cortlandt, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1918	\$815,000.00		\$815,000.00
(B) For Designated Purposes	\$13,342,155.76	\$172,118.37	\$13,514,274.13
ADAMS (ERNEST KEMPTON) FUND FOR PHYSICAL RESEARCH: Gift of Edward D. Adams, in memory of his son, the late Ernest Kempton Adams, such part of the income as shall be designated by the Trustees to be applied to the stipend of the Research Fellow pursuing researches in the Physical Sciences or in their practical applications; the income re- ceived in excess of such stipend to be used in the publication and distribution of the results of the investigation carried on by such Fellows. Established 1904	\$65,000.00		\$65,000.00
ALDRICH (JAMES HERMAN) SCHOLARSHIP FUND: Gift of James H. Aldrich, of the Class of 1863, to establish this fund in commemoration of the fiftieth anniversary of his graduation. Established 1913	5,000.00		5,000.00
ALDRIDGE (WALTER H.) FUND: Gift of Walter H. Aldridge, the income to provide scholarships in the School of Engineering. Established 1936.	25,000.00		25,000.00
ALUMNI SCHOLARSHIP FUND: Gift of various donors, the income to be used in connection with the annual appropriation known as the President's Scholarship Fund. Established 1935	1,801.00		1,801.00
ALUMNI WAR BONUS FUND: Proceeds of Adjusted Compensation Certificates donated by Columbia University War Veterans, the income to be expended in such manner and for such purposes as the Trustees may from time to time direct. Established 1929.	35,463.26	\$2,097.38	37,560.64

		R	EPORT	OF TI	IE TR	EASUR	ER	12
	10,000.00	101,000.00	100,000.00	200,000.00	299,389.80	50,000.00	62,300.00	
_			:		7,375.95	:	:	
-	10,000.00	101,000.00	100,000 00	200,000.00	292,013.85	50,000.00	62,300.00	
ANTONINAMOTIC DITATO DAD CAMOTED DEGRADOR.	ANON I MOUS FORD FOR CANCER RESEARCH: Established by transfer of a gift for the same purpose, the income to be used for the work of the Institute of Cancer Research. Established 1932	ANONYMOUS FUND FOR CHURCH AND CHORAL MUSIC: Gift of an Anonymous Donor to establish this fund, the income to be used to maintain a Professorship in Church and Choral Music. Established 1913	ANONYMOUS FUND FOR THE DEPARTMENT OF MINING AND METALLURGY: Gift of an Anonymous Donor to establish a fund for the use and benefit of the Department of Metallurgy in the School of Mines. The clear Annual Sum of \$5,000 to be paid to the donor during his lifetime. Established 1925.	ANONYMOUS FUND FOR DEPARTMENT OF PRACTICE OF MEDICINE: Established by the transfer of a gift for the erection of a Medical School Dormitory, the income to be used for the Department of Practice of Medicine until such time as the principal is used for the erection of the Dormitory. Established 1932	ANONYMOUS FUND FOR PHYSICS AND PHYSICAL CHEMISTRY: Gift of an Anonymous Donor, the income to be paid to the donor during his lifetime and thereafter to Columbia University in accordance with the terms of agreement. Established 1928	ANONYMOUS FUND FOR SCHOLARSHIPS IN THE COLLEGE OF PHYSICIANS AND SURGEONS: Gift of an anonymous donor, the income to provide one or more scholarships as the Trustees may direct. Established 1937	ANONYMOUS FUND FOR STUDENT AID: Gift of an Anonymous Donor, the income to be paid to the donor during his lifetime and thereafter to be loaned to students in the School of Engineering. Any sums repaid by students to be set up in separate fund, the income to be used in aid of scientific research in Physics and Chemistry. Established 1934	

At June 30, 1939	\$100,000.00	50,000.00	21,000.00	6,000.00	29,000.00	1,755.46
Additions 1938–1939			: : : : : : :			\$554.41
At June 30, 1938	\$100,000.00	50,000.00	21,000.00	6,000.00	29,000.00	\$1,201.05
	ART PROFESSORSHIP FUND: Bequest of Hugo Reisinger to found a professorship of the History of Arts. Established 1916	AVERY ARCHITECTURAL FUND: Gift of Samuel P. Avery and Mary Ogden Avery in memory of their deceased son, Henry Ogden Avery, the income of the fund to be applied to the purchase of books relating to architecture, decorations and allied arts. Established 1890, and augmented in 1910 by \$20,000	BAIER (VICTOR) FELLOWSHIP FUND: Bequest of the late Victor Baier to establish a fellowship in church music to be governed by such rules and regulations as may be determined by the Trustees. Established 1922	BANGS (FRANCIS SEDGWICK) FUND: Gift of Mrs. Francis Sedgwick Bangs to establish a scholarship in the School of Law in memory of her husband, the late Francis Sedgwick Bangs of the Class of 1878 and a Trustee of the Uni- versity from 1900 to 1920; the scholarship to be awarded to a qualified student who is a member of either the Anglo-Saxon, the Germanic, the Scandinavian, or the Latin race; and preferably one who has been a student in Columbia College. Established 1926	BARKER (CLARENCE) MUSICAL SCHOLARSHIP FUND: Bequest of the late Mrs. Virginia Purdy Bacon, to establish a graduate scholarship in the Department of Music. Established 1921	BARKER (MARY PERIN) FUND FOR STUDENT AID, SCHOOL OF ENGINEERING: Gift of staff members, alumni, students and friends of the School of Engineering, the income or principal to be used as an emergency fund for the benefit of students in that School. Established 1938

	R	EPORT OF	тне	TREA	SURE	R	1.
2,200 00	10,000.00		59,600.00	16,250.00	46,106.50	140.187.24	
	:				:		
2,200.00	10,000.00		59,600.00	16,250.00	46,106.50	1.10,187.24	
BARLOW (DR. WALTER J.) FUND: Gift of Dr. Walter J. Barlow, the income or principal to be used to meet the cost of Columbia University Medals. Established 1930.	BARNARD FELLOWSHIP FUND: Legacy from the late President Barnard to establish the Barnard Fellowship for encouraging Scientific Research. Established 1889	HARNARD LIBRARY FUND: The residuary estate of the late President Barnard was left to the Trustees of Columbia College to constitute a fund under the name of the 'Barnard Fund for the Increase of the Library', the income of which is to be devoted to the purchase of books, especially those relating to physical and astronomical science; but out of the income of this fund so much as may be necessary is to be applied in procuring a gold medal of the bullion value of not less than \$200, to be styled the Barnard Medal for Meritorious Service to Science, to be awarded every five years on the judg-	ment of the National Academy of Sciences of the Office Sciences of the Managemy of Sciences of the Office Sciences of the Managemy of Sciences	The residuary estate of the late Margaret Barnard, widow of the late President Barnard, was left to the Trustees of Columbia College, 'to augment the sum left by my late husband.' Established 1892.	BARSTOW (FREDERIC D.) SCHOLARSHIP FUND: Git of William S. Barstow, the income, except for that portion payable to the donor in accordance with the terms of the agreement, to provide scholarships in Columbia College. Established 1935.	BARSTOW (W. S.) SCHOLARSHIP FUND: Gift of William S. Barstow, the income, except for that portion payable to the donor in accordance with the terms of the agreement, to provide scholarships in any of the Engineering Schools of the University. Established 1935	

At June 30, 1939			\$10,000.00	10,000.00	10,300.00	1,000.00	100,000.00
Additions 1938–1939						1,000.00	100,000.00
At June 30, 1938			\$10,000.00	10,000.00	10,300.00	1,000.00	
	BEARNS (JOSEPH H.) FOUNDATION: Bequest of the late Lillia M. Bearns, the income to be used for prizes in Music. (Principal held by the Trustees under the Will.) Established 1926.	BECK FUNDS:  The late Charles Bathgate Beck bequeathed the sum of \$10,000.00 to be applied as follows: \$2,000 to found one free scholarship, the income to be applied 'to the free yearly tuition and education in said College of one student forever, under such terms and conditions as the rules of said Col-	lege and said 'Iristoes snail prescribe, the income of the temaining \$5,000 to be used for an annual prize 'to the student in the Law School who shall pass the best examination in Real Estate Law.' Established 1899.  Beck Scholarship Fund.  Beck Prize Fund.  \$2,000.00	BEEKMAN (GERARD) FUND: Bequest of the late Gerard Beekman, formerly a Trustee of Columbia University, the income to be used in connection with the work of the Chaplain. Established 1920	BEER (JULIUS) LECTURE FUND:  Bequest of the late Julius Beer, the income of which is to be applied to providing lectures at intervals not exceeding three years, by lecturers nominated by the Faculty of Political Science and confirmed by the Trustees. Established 1903.	BENNETT PRIZE FUND: Gift of James Gordon Bennett, the income or a medal of equal value, to be given for 'an essay in English prose upon some subject of contemporaneous interest in the domestic or foreign policy of the United States.' Established 1893	BERGH (HENRY) FUND: Anonymous Gift, the income to be used for the promotion of humane education. Established 1907.

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92,201.58	1,570.00	122,097.65	28,446.13	100,000.00	6,200.00	1,000.00	
-							
92,201.58	1,570.00	122,097.65	28,446.13	100,000.00	6,200.00	1,000.00	
BENTUCH (FREDERICK) SCHOLAKSHIF FUND:  Boquest of the late Frederick Bertuch, the income to be applied in assisting needy students to pursue courses of study in any department of the University. Established 1929	BJORKWALL (CHARLES H.) PRIZE FUND: Bequest of Ottle E. Bjorkwall in memory of her brother, Dr. Charles H. Bjorkwall, the income to provide an annual prize to a member of the graduating class of Columbia College who has given conspicuous evidence of unselfishness during his college course. Established 1937	BLUMENTHAL ENDOWMENT FUND: Gift of George Blumenthal for the endowment of a Chair of Politics. Established 1906	BLUMENTHAL (GEORGE, Jr.) FUND: Gift of Mr. and Mrs. George Blumenthal, the income to be awarded to students of Medicine to cover the cost of tuition, or for other purposes. Established 1909.	BONDY (EMIL C.) FUND:  Bequest of the late Emil C. Bondy, the income of which is to be applied, first, toward investigation into the cause, prevention and cure of cancer, and second, toward general research in medicine and surgery and their allied subjects. Established 1916.	BORING FELLOWSHIP FUND: Gift of Edward C. Moore, Jr., to establish a Fellowship in the School of Architecture. Established 1922.	BOUVIER (W. SERGEANT) MEMORIAL CUP FUND: Gift of John Vernou Bouvier, Jr. and John Vernou Bouvier III, the income to provide an annual Cup to be presented to the member of the Freshman Crew who has best exhibited the qualities of college loyalty, self-discipline and improvement in watermanship throughout the rowing season. Established 1930.	

	At June 30, 1938	Additions 1938–1939	At June 30, 1939
BRAINARD (EDWARD SUTLIFF) MEMORIAL PRIZE FUND: Git of Miss Phoebe T. Sutliff in memory of her nephew, Edward Sutliff Brainard, of the Class of 1921, the income to be awarded annually to that student in the graduating class of Columbia College who is adjudged by his classmates, according to such rules as the Faculty may prescribe. as most worthy of distinction on the ground of his qualities of mind and character. Established	\$1,200.00		\$1,200.00
BRIDGHAM (SAMUEL WILLARD) FUND: Gift of Mrs. Fanny Bridgham to establish a fund, in memory of the late Samuel Willard Bridgham, of the Class of 1867, School of Mines, the income to be applied to the support of a Fellowship to be awarded annually by the Faculty of Applied Science. Established 1915	25,500.00		25,500.00
BRITTON (NATHANIEL LORD AND ELIZABETH GERTRUDE) FUND: Bequest of Nathaniel Lord Britton, the income to be used for the Departments of Geology and Botany. Established 1934.	23,178.60	; ; ; ; ; ;	23,178.60
BULL (WILLIAM T.) MEMORIAL FUND: From the William T. Bull Memorial Fund Committee, in honor of the late William T. Bull, M. D., the income to be applied to meet the cost of conducting original research under the direction of the Department of Surgery. Established 1911.	32,250.00		32,250.00
BUNNER PRIZE FUND: Gift of friends of the late Henry Cuyler Bunner, the income to be used to provide every year the 'H. C. Bunner Medal,' to be given to the student who shall present the best essay on an assigned subject in American literature. Established 1896	2,000.00		2,000.00
BURGESS (ANNIE P.) SCHOLARSHIP FUND:  Bequest of the late Annie P. Burgess to establish a fund, the income to be applied to the tuition and expenses each year of a worthy and deserving young man of good habits and Christian character. Established 1913.	5,000.00		5,000.00

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5,000.00	1,804.00	3,000.00	00.000,0	2,742.75	1.00	6,000.00	
	\$341.50			242.75			_
5,000.00	1,462.50	3,000.00	6,000.00	2,500.00	1.00	6,000.00	
BURGESS (DANIEL M.) SCHOLARSHIP FUND:  Bequest of the late Annie P. Burgess to establish a fund, the income to be applied to the tuition and expenses each year of a worthy and deserving young man of good habits and Christian character. Established 1913	BUSINESS ALUMNI SCHOLARSHIP FUND: Gift of various donors, the income to be used for one or more Alumni Scholarships in the School of Business. Established 1934.	BUTLER (NICHOLAS MURRAY) MEDAL FUND:  Citt of Archer M. Huntington to establish a fund, the income to be used in providing a gold medal every five years and a silver or bronze medal annually for the most distinguished contribution made anywhere in the world of philosophy, or to educational theory, practice or administration. Established 1914.	BUTLER (RICHARD) SCHOLARSHIP FUND: Gift of Mrs. Richard Butler in memory of her deceased husband, Richard Butler. Open to students born in the State of Ohio. Established 1903	BUTLER (SUSANNA EDWARDS SCHUYLER) FUND: Bequest of the late Eliza Rhees Butler, the income to be expended under the direction of the President, Established 1935	CALDWELL (EUGENE WILSON) FUND:  Bequest of the late Eugene Wilson Caldwell, the income to be used in support of instruction and research in the application of physical science to medicine, surgery and public health. Established 1935	CAMPBELL SCHOLARSHIP FUND: Gift of \$3,000 each from Miss Maria L. Campbell and Miss Catherine B. Campbell to establish two scholarships in Columbia College in memory of Robert B. Campbell, of the Class of 1844, and Henry P. Campbell, of the Class of 1847. Established 1900	

as At June 30, 39 1939	0.14 \$231,281.65	3.89 185,968.89	75,000.00	0.00	15,000.00	150,000.00	20,000.00
Additions 1938–1939	\$176,100.14	185,968.89		50,000.00			
At June 30, 1938	\$55,181.51		75,000.00		15,000.00	150,000.00	20,000.00
	CAMPBELL (WILLIAM) FELLOWSHIP FUND: Bequest of the late William Campbell, the income to provide a Fellowship in Scientific Research. Established 1938.	CARDOZO (BENJAMIN N.) FUND: Bequest of the late Benjamin N. Cardozo, to establish a Chair of Jurisprudence in the Law School Established 1938	CARNEGIE (ANDREW) FUND FOR THE SCHOOL OF LIBRARY SERVICE: Gift of the Carnegie Corporation, the income or principal to be used for the support of the School of Library Service. Established 1938.	CARNEGIE CORPORATION FUND FOR GRADUATE MEDICAL INSTRUCTION AND RESEARCH: Gift of the Carnegie Corporation, the income to be used for graduate medical instruction and research at the College of Physicians and Surgeons. Established 1938	CARNEGIE CORPORATION FUND FOR INSTITUTE OF INTERNATIONAL AFFAIRS: Established by the transfer of a gift for the same purpose, the income to accumulate until further action by the Trustees. Established 1937	CARNEGIE CORPORATION PROFESSORSHIP FUND: Gitt of the Carnegie Corporation to endow a professorship in the School of Library Service. Established 1938	CARPENTER (CLARENCE) FUND: Gift of Mrs. Josephine L. Carpenter in memory of her husband, Clarence Carpenter, the income to be used to promote Cancer Research. Established 1928

	R E	PORT	OF 7	THE TRE	ASUR	ER	13
250,000.00	300,100.00	100,000.00	19,000.00	13,933.48	8,390.37	285,000.00	
:				395.17			
250,000.00	300,100.00	100,000.00	19,000.00	13,538.31	8,390.37	285,000.00	
CARPENTIER (EDWARD R.) FUND: Gift of Mrs. Maria H. Williamson for the endowment of a 'Professorship, or an endowed lecture- ship, on the origins and growth of civilization among men.' Established 1906	CARPENTIER (JAMES S.) FUND: Gift of General H. W. Carpentier to establish a fund in memory of his brother, James S. Carpentier, for the benefit of the Law School. Established 1903	CARPENTIER (R. S.) FUND: Gift of General H. W. Carpentier towards a professorship in the Medical School, in memory of Reuben S. Carpentier. Established 1904	CARTER (HERBERT S.) MEMORIAL FUND: Gift of the family and friends of Dr. Herbert S. Carter, the income to be used primarily for lectures in the Medical School. Established 1929	CARTWRIGHT LECTURESHIP FUND: Gift of the Alumni Association of the College of Physicians and Surgeons, the income to be allowed to accrue and to be added to the principal until further action by the Trustees, the annual income then to be used for the support of lectureships at the Medical School in accordance with the wishes of the late Benjamin Cartwright. Original gift \$8,800.50. Established 1928	GASA ITALIANA ENDOWMENT FUND: Gift of various donors, the income to be applied toward the maintanance of the Casa Italiana. Established 1926	CASTNER (HAMILTON YOUNG) FUND:  Bequest of the late Cora M. Perkins, the income to be invested by the Trustees of Columbia University in such manner as shall in their judgment most effectively encourage chemical investigation and research. Established 1923.	

At June 30, 1939	\$180,000.00	151,792.50		7,500.00	1,100.00	381.00
Additions 1938–1939		:				381.00
At June 30, 1938	\$180,000.00	151,792.50		7,500.00	1,100.00	381.00
	CENTER FUND:  Gift of Mary B. Ludlow, in memory of her son, the late Robert Center, the income to he applied either to the salary of a Professor of Music, or of other Instructors of Music, or to Fellowships, Scholarships in Music, or to be used in any one or more of these or such other ways as shall, in the judgment of the Trustees, tend most effectually to elevate the standard of musical instruction in the United States, and to afford the most favorable opportunity for acquiring instruction of the highest order. Established 1896	CHAMBERLAIN (JOSEPH P.) ENDOWMENT FUND: Gift of Joseph P. Chamberlain for the endowment of a chair of legislation. Established 1917	CHAMBERIAIN (LYDIA C.) FUND: Gift of Lydia C. Chamberlain, the income to be used for fellowships in accordance with the terms of the Deed of Trust. (Principal held by Trustees under the Deed of Trust.) Established 1920	CHANDLER (CHARLES FREDERICK) FUND: From the Alumni of Columbia University to establish this fund in honor of Professor Charles Frederick Chandler, the income to be applied to the delivery and publication of at least one public lecture each year on some phase of the science of Chemistry, etc. Established 1910	CHANLER PRIZE FUND:  Bequest of J. Winthrop Chanler, of the Class of 1847, to found an annual prize for 'the best original manuscript essay in English prose on the History of Givil Government of America, or some other historical subject.' Established 1877.	CHAPEL FURNISHING FUND: Created by act of the Trustees on Feb. 1, 1926, by the transfer of the balance of the St. Paul's Chapel Windows Gift Account. This sum to constitute a special fund, either the principal or income of which may be used for furniture and equipment of St. Paul's Chapel. Established 1926.

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1,050.00	15,250.00	10,000.00	100.00				2,000.00	
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1,050.00	15,250.00	10,000.00	100.00				2,000.00	
CHAPEL MUSIC FUND: Gift of Gerard Beekman of the Class of 1864 to establish this fund, the income to be applied to the purchase of suitable music for use in the services in St. Paul's Chapel. Established 1913	CLARK SCHOLARSHIP FUND:  Bequest of the late Alonzo Clark, M.D., formerly President of the College of Physicians and Surgeons, for the purpose of promoting the discovery of new facts in medical science. First prize bestowed October 1, 1894	CLASS OF 1848 SCHOLARSHIP FUND: Gift of an Anonymous Friend, for the endowment of two Scholarships in Columbia College. Established 1902	CLASS OF 1869 FUND: Representing the amount held by the Treasurer of the Class of 1869 at the time of his death. The income or principal to be used as the surviving members of the class may designate. Established 1924.	CLASS OF 1878 MINES: Gift of the Class of 1878 Mines of \$1,000.00, added to the Permanent Alumni Fund. Received 1929.	CLASS OF 1880: Gift of the Class of 1880 of \$5,000.00 added to the Columbiana Endowment Fund. Received 1930.	CLASS OF 1880: Gift of the Class of 1880 of \$200.00 added to the Permanent Alumni Fund. Received 1931.	CLASS OF 1881 ARTS AND MINES FUND: Gift of the Class of 1881 Arts and Mines in commemoration of the fortieth anniversary of their graduation, for the maintenance of the Class of 1881 flagpole and for the purchase of Columbia flags. Established 1921.	

	At June 30, 1938	Additions 1938–1939	At June 30, 1939
CLASS OF 1881 COLLEGE: Gift of the Class of 1881 College of \$10,000.00 added to the Columbiana Endowment Fund. Received 1931.			
CLASS OF 1882: Gift of the Class of 1882 of \$8,250.00 added to the Columbiana Endowment Fund. Received 1932, 1933, 1934, 1935.			
CLASS OF 1883; Gift of the Class of 1883 of \$1,500.00 added to the Columbiana Endowment Fund. Received 1933.			
CLASS OF 1884: Gift of the Class of 1884 of \$50.00 added to the Columbiana Endowment Fund. Received 1935.			
CLASS OF 1884 ARTS AND MINES: Gift of the Class of 1884 Arts and Mines of \$380.00 added to the Columbiana Endowment Fund. Received 1934.			
CLASS OF 1884 ENGINEERING: Gift of the Class of 1884 Engineering of \$700.00 added to the Columbiana Endowment Fund. Received 1934.			
CLASS OF 1885 SCHOOL OF MINES FUND: Gift of the Class of 1885 School of Mines in commemoration of the twenty-fifth anniversary of their graduation, the income to be applied to the maintenance of a Scholarship in the Schools of Mines, Engineering and Chemistry. Established 1910.	\$14,125.00		\$14,125.00
CLASS OF 1886 FUND: Gift of the Class of 1886, the income to be used for the purchase of books or pamphlets. Established 1986	2,310.00	2,310.00	2,310.00

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	8,000.00	400.00	2,520.00	200.00	14,700.00	1,040.29	
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	8,000.00	400.00	2,520.00	200.00	14,700.00	1,040.29	
CLASS OF 1887 MINES: Gift of the Class of 1887 Mines of \$50.00 added to the Columbiana Endowment Fund. Received 1931.	CLASS OF 1887 MINES, DORMITORY ROOM ENDOWMENT FUND: Gift of the Class of 1887 Mines, for the endowment of room 933 Livingston Hall, the occupancy thereof to be awarded as provided in the deed of gift. Established 1937	CLASS OF 1888 ARTS AMD MINES FUND: For the maintenance of the Class of 1888 Gates. Established 1917	CLASS OF 1888 COLLEGE AND ENGINEERING FUND: Gift of the Class of 1888 Arts and Mines, the income to be used for the purposes and benefit of the Columbiana Collection. Established 1937	CLASS OF 1889 MEDAL FUND: Gift of the Class of 1889 School of Mines in commemoration of the twenty-fifth anniversary of their graduation, the income to be applied to the cost of a medal to be awarded triennially to a graduate of the School of Mines, or of any of the schools of applied science or architecture, who shall have distinguished himself by eminent achievement in any sphere of human effort. Established 1915.	CLASS OF 1892 ARTS AND MINES FUND: Gift of the Class of 1892 Arts and Mines for the endowment of rooms 633 Hartley and 431 Furnald, the occupancy thereof to be awarded as provided in the deed of gift. If in any year the income be in excess of the amount required for this purpose, the University may apply such surplus income for the general use of the University. Established 1917	CLASS OF 1893 MEMORIAL FUND: Gift of the Class of 1893, the income to be expended as designated by the Class. Unless the Class shall make such designation, the income to be used in such manner as the Trustees may direct. Established 1933.	CLASS OF 1895: Gift of the Class of 1895 of \$4,904.11 added to the Permanent Alumni Fund. Received 1923, 1931.

	At June 30, 1938	Additions 1938–1939	At June 30, 1939
CLASS OF 1896 ARTS AND MINES SCHOLARSHIP FUND: Gift of the Class of 1896, Arts and Mines in commemoration of the twenty-fifth anniversary of their graduation. Established 1921.	\$16,000.00		\$16,000.00
CLASS OF 1898 PRIZE FUND:  Gift of the Class of 1898 in commemoration of the twenty-fifth anniversary of its graduation and in memory of John Howard Van Amringe of the Class of 1860 to establish a fund, the income to be used in providing a bronze medal to be awarded each year to that member of the Sophomore Class who shall have most distinguished himself for service, character and courtesy in his relations to faculty, fellow students and visitors to the University. Established 1923. (See Van Am Prize Fund in this Schedule for amount.)			
CLASS OF 1898 COLLEGE, ENGINEERING AND ARCHITECTURE FUND: Gift of the Class of 1898, the income to be used for the purchase of books for the Library. Established 1937.	6,351.47	\$5.00	6,356.47
CLASS OF 1899 COLLEGE: Gift of the Class of 1899 College of \$1,000.00 added to the Students Loan Fund. Received 1925.			
CLASS OF 1899 COLLEGE OF PHYSICIANS AND SURGEONS SCHOLARSHIP FUND: Gift of the Class of 1899 of the College of Physicians and Surgeons in commemoration of the thirty-fifth anniversary of their graduation, the income to provide a Resident Scholarship at the College of Physicians and Surgeons. Established 1934	3,717.00	605.00	4,322.00
CLASS OF 1901 DECENNIAL FUND: Gift of the Class of 1901 College and Applied Science, the income to be applied toward the expenses of maintaining the work of the Committee on Employment of Students. Established 1911	1,400.00		1,400.00
CLASS OF 1903: Gift of the Class of 1903 of \$12,000.00 added to the Students Loan Fund. Received 1930.			

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17,600.00		6,937.00	1,000.00	4,500.00	1,500.00	6,880.00	4,125.00	
1,500.00		225.00			:	115.00	3,100.00	
16,100.00		6,712.00	1,000.00	4,500.00	1,500.00	6,765.00	1,025.00	
CLASS OF 1904 SCHOLARSHIP FUND: Gift of the Class of 1904 College and Science, the income to be used for scholarships in accordance with the terms of the gift. Established 1929.	CLASS OF 1906: Gift of the Class of 1906 of \$12,603.03 added to the Revolving Fund for Athletic Activities. Recived 1931.	CLASS OF 1907 COLLEGE AND ENGINEERING SCHOLARSHIP FUND: Git of the Class of 1907, in commemoration of the thirtieth anniversary of their graduation, the income to be used for "The Class of 1907 Scholarship," to be awarded annually, with first pre- ference to sons and other descendants of class members. Established 1937	CLASS OF 1909 FLAGPOLE FUND: Created by act of the Trustees November 7, 1927, the income to be used for the care and maintenance of the flagpole on Baker Field	CLASS OF 1911 FUND: Gift of the Class of 1911 to endow a room in one of the dormitories for a deserving student each Session. Established 1936	CLASS OF 1912 LAW FUND: Gift of the Class of 1912, in commemoration of the twenty-fifth anniversary of their graduation, the income to be disposed of under the guidance of members of the Class and of the Law School Faculty. Established 1937.	CLASS OF 1912 PHYSICIANS AND SURGEONS FUND: Gift of the Class of 1912 of the College of Physicians and Surgeons, the income to be used under the direction of the Dean of the School of Medicine. Established 1927	CLASS OF 1913 SCHOLARSHIP FUND: Gift of the Class of 1913, the income to be used for scholarships. Established 1938	

At June 30, 1939	\$8,920.00	656.42		3.00	4,515.00	4,500.00		701.17
Additions 1938–1939	\$8,900.00	40.00						84.33 (Decrease)
At June 30, 1938	\$20.00	616.42		3.00	4,515.00	4,500.00		785.50
	CLASS OF 1914 COLLEGE AND ENGINEERING—25711 ANNIVERSARY FUND: Gift of the Class of 1914, to Establish a Fund in Commemoration of the 25th Anniversary of its Graduation. Established 1937.	CLASS OF 1916 LAW-SCHOLARSHIP ENDOWMENT FUND: Gift of the Class of 1916, to be held by the University for Scholarship Endowment. Established 1937.	CLASS OF 1917 ENGINEERING: Gift of the Class of 1917 Engineering of \$2,500.00 added to the Engineering School Student Loan Fund. Received 1928.	CLASS OF 1917 ENGINEERING—DORMITORY ROOM ENDOWMENT FUND: Gift of the Class of 1917, to be held by the University for Dormitory Room Endowment. Established 1938	CLASS OF 1917 SCHOLARSHIP FUND: Gift of the Class of 1917 College and Journalism, the income to be used for scholarships. Established 1936	CLASS OF 1920 DECENNIAL FUND: Gift of the Class of 1920 for the endowment of room 603 Hartley Hall, the occupancy thereof to be awarded as provided in the deed of gift. Established 1930	CLASS OF 1921 MINES: Gift of the Class of 1921 Mines of \$110.00 added to the Wendell Medal Fund. Received 1927.	CLASS OF 1921 SCHOLARSHIP FUND: Gift of the Class of 1921 College, the income to be used for scholarships. Established 1936

CLASS OF 1922 COLLEGE—SCHOLARSHIP ENDOWMENT FUND: Gift of the Class of 1922, to be held by the University for Scholarship Endowment. Established 1937.	629.50	68.50	698.00
CLASS OF 1924 COLLEGE—DORMITORY ROOM ENDOWMENT FUND: Gift of the Class of 1924, to be held by the University for Dormitory Room Endowment. Established 1937	586.00	465.00 (Decrease)	121.00
CLASS OF 1926 COLLEGE—DORMITORY ROOM ENDOWMENT FUND: Gift of the Class of 1926, to be held by the University for Dormitory Room Endowment. Established 1937.	371.00	5.00	376.00
CLASS OF 1927 COLLEGE—LIBRARY ENDOWMENT FUND: Gift of the Class of 1927, to be held by the University for Library Endowment. Established 1937	144.00		144.00
LASS OF 1927 FUND: Git of the Class of 1927, the income to be added to the principal until further advice of the members of the Class. Established 1929	1,000.34	12.32 (Decrease)	988.02
CLASS OF 1928 PHYSICIANS AND SURGEONS DECENNIAL FUND: Gift of the Class of 1928, the purpose to be designated later. Established 1939		122.00	122.00
LASS OF 1929 TENTH ANNIVERSARY FUND: Gift of the Class of 1929, the income to be used for general purposes unless the class otherwise designates. Established 1939		331.86	331.86
JASS OF 1932 FUND: Gift of the Class of 1932 to endow a Dormitory Room annually. Established 1936	131.50	10.00	141.50
CLASS OF 1933 PHYSICIANS AND SURGEONS FUND: Gift of the Class of 1933 for the purchase of medical instruments. Established 1936	67.00		67.00
LASS OF 1935 LAW SCHOLARSHIP FUND: Gift of the Class of 1935, the income to be used for scholarships. Established 1936	74.50	2.00	79.50

At June 30, 1939	\$1,125.00	566,000.00	1,325.00	4,000.00	1,000.00
Additions 1938–1939					1,000.00
At June 30, 1938	\$1,125.00	566,000,00	1,325.00	4,000.00	
	COCK (THOMAS F., M.D.) PRIZE FUND:  Bequest of the late Augustus C. Chapin, the income to be used to provide an annual prize to be known as the "Thomas F. Cock, M.D., Prize' for the best thesis on puerperal fever. Established 1915.	COLLINS (PERRY MCDONOUGH) SCHOLARSHIP FUND: Bequest of the late Kate Collins Brown, the annual income to be divided into amounts of three hundred dollars (\$300.) to be paid annually under such rules and regulations as the Board of Trustees of the College may from time to time establish, to each of those undergraduates in the academic and scientific courses of the College whose pecuniary condition and resources are, in the judgment of the Board of Trustees, insufficient to defray the expenses of his college education; and if the College is unable in any year to use the entire income of the said Fund for the purposes aforesaid, after making every proper effort to do so, the balance of the income from the Fund in that year, not needed for the aforesaid purposes, shall be applied to the general purposes of the academic and scientific departments of the College. Established 1918	COLUMBIA ALUMNI IN MEMORIAM FUND: Gifts received through the Columbia Alumni Fund, the income to be paid to the Columbia Alumni Fund. Established 1928	COLUMBIA ALUMNI IN PERPETUITY FUND: Gifts received through the Columbia Alumni Fund, the income to be paid to the Columbia Alumni Fund. Established 1928	COLUMBIA HUDSON-FULTON PRIZE FUND: Gift of the representatives of the various Committees having charge of the reception given on the University grounds in October 1999, under the auspices of the Hudson-Fulton Celebration Commission, the income to be used for an annual prize or prizes, to be known as the Columbia Hudson-Fulton Prize or Prizes, for an athletic event. Established 1909

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31,183.50	10,037.72	1,100.00	17,025.00	1,415,000.00	1,700.00		50,000.00
\$7.00				:		1,706.00 (Decrease)	
31,176.50	10,037.72	1,100.00	17,025.00	1,415,000.00	1,700.00	1,706.00	50,000.00
COLUMBIANA ENDOWMENT FUND: Gift of various donors, the income to be used for the support of Columbiana. Established 1930	COLUMBIA UNIVERSITY FOOTBALL ASSOCIATION FUND: From the Trustees of the trust created by the Columbia University Football Association, the income to be applied towards the support of athletic teams or crews representing Columbia University in intercollegiate sports. Established 1911.	CONVERS (E. B.) PRIZE FUND: Gift of Miss Alice Convers and Miss Clara B. Convers to endow, in memory of their brother, Ebenezer Buckingham Convers, of the Class of 1866, a prize in the Columbia Law School. Estabished 1906.	COTHEAL FUND:  Gift of Mrs. James R. Swords and Mrs. Samuel Lawrence as a memorial to their brother, Alexander I. Cotheal, the income to be used for the purchase of books in the Oriental Languages, or relating to Oriental countries. Established 1896.	CROCKER (GEORGE) SPECIAL RESEARCH FUND: Bequest of the late George Crocker, the income to be used in Cancer Research. Established 1911	CROSBY (WILLIAM O.) COLLECTION OF LANTERN SLIDES FUND: Gitt of \$1,800, from friends of Professor William O. Crosby, of Boston, to establish and maintain the collection of geological lantern slides in the Department of Geology known by above title. One hundred dollars was made immediately available and \$1,700 is to constitute a permanent fund, the income only to be used for above purposes. Established 1913	CROSS (A. K.) VISION TRAINING FUND: Gift of various donors, the income to be used for the benefit of the students of the Home Study Course in Drawing and Painting. Established 1928	CURRIER (NATHANIEL) FUND:  Bequest of Lura Currier, to establish the Nathaniel Currier Fund, the income to be used for the purchase of books for the Library. Established 1908

	At June 30	Additions	At June 30
	1938	1938–1939	1939
CURTIS (CARLTON C.) FUND: Gift of Carlton C. Curtis for the endowment of a branch of creative investigation under the terms and conditions as set forth in the deed of gift. Established 1921	\$30,379.29		\$30,379.29
CURTIS FELLOWSHIP FUND: Gift of the George William Curtis Memorial Committee to establish a fellowship in the School of Political Science in Columbia University, to bear the name and to perpetuate the memory of the late George William Curtis, the holder of the fellowship to devote himself to the study of the science of government, with a special view to its application to the then existing conditions of the United States, or the State or City of New York, and to publish a monograph on some sub-		0	
ject relating to the then existing condition of the United States, etc. Established 1899	10,000.00		10,000.00
CURTIS (GEORGE WILLIAM) MEDALS FUND: Gift from an associate of George William Curtis in the Civil Service Reform work. Established 1902.	1,300.00	: : : : : : :	1,300.00
CUTTING (W. BAYARD) FUND: Gift of Mrs. W. Bayard Cutting and her children to establish this fund in memory of the late W. Bayard Cutting, of the Class of 1869, the income to provide travelling fellowships. Estab- lished 1913	160,000 00		160,000.00
CUTTING (W BAYARD, Jr.) FELLOWSHIP FUND: Gift of W. Bayard Cutting, to establish the 'W. Bayard Cutting, Jr. Fellowship Fund.' \$600 annually is payable to Grafin Eva von Wurmbrand during her lifetime; thereafter, the income shall be used to provide a fellowship in International I.aw, to be awarded annually at the pleasure of the Trustees, to that student, who, in their judgment, shall have attained a standard of excellence to justify the award. Established 1912	18,331.98	\$151,61	18,483,59

	REPOR	T OF T	HE TRE	ASUR	ER	14
86,600.00	1,070.00	250,000.00	194,151.11	5,446,035.08	173,800.00	1,000 00
		-	760.17	(Decrease)	-	
86,600.00	1,070.00	250,000.00	194,911.28	5,436,924.68	173,800.00	1,000.00
DA COSTA PROFESSORSHIP FUND:  The late Charles M. DaCosta, a member of the Class of 1855, bequeathed to the Trustees of Columbia College \$100,000. Of this sum, the Trustees, on October 6, 1891, for the endowment of a char in the Department of Biology, set apart \$80,000, which has been increased by the profits of certain investments to	DARLING (EDWARD A.) PRIZE FUND: Bequest of the late Edward A. Darling, formerly Superintendent of Buildings and Grounds, the income to be awarded as a prize each year at Commencement to that student of the senior class in Engineering whose work during his course of study is voted by his classmates to have been the most honest and thorough. Established 1903.	DEAN LUNG PROFESSORSHIP OF CHINESE FUND: Gift of an anonymous friend to found a department of Chinese Languages, Literatures, Religion and Law and especially for the establishment of a Professorship to be known as the Dean Lung Professorship of Chinese. Established 1901.	DELAFIELD (FRANCIS) ALUMNI PROFESSORSHIP FUND: Gift of the Alumni Association of the College of Physicians and Surgeons, the income to be allowed to accrue and to be added to the principal until such time as the principal shall amount to \$200, 000, the income then to be used for the salary of a professorship in the Department of Pathology. Original gift \$119,022.20. Established 1928.	DE LAMAR (JOSEPH R.) FUND: Bequest of the late Joseph R. DeLamar, the income to be expended in such manner as the Trustees may from time to time direct in accordance with the terms of the bequest. Established 1919	DENNETT (HORACE) SCHOLARSHIP FUND: Bequest of Lizzie Dennett Lockwood, the income to provide annual scholarships to Third and Fourth year students in the College of Physicians and Surgeons. Established 1932	DEUTSCHER VEREIN PRIZE FUND: Gift of the Deutscher Verein in Columbia University to establish an annual prize in German. Established 1917.

At June 30, 1939	\$17,873.00	6,500.00	15,400 00	12,340.00	100,000.00	10,000.00
Additions 1938-1939				\$540.00		
At June 30, 1938	\$17,873.00	6,500.00	15,400.00	11,800.00	100,000.00	10,000.00
	DEUTSCHES HAUS ENDOWMENT FUND: Gift of Adolph Busch received in 1912 and later transferred to the Germanistic Fund: re-established in 1928, the income to be expended in equipping and maintaining the Deutsches Haus	DEVENDORF (DAVID M.) SCHOLARSHIP FUND: Gitt of Mrs. David M. Devendorf, to establish the 'David M. Devendorf Scholarship Fund' as a memorial to her deceased husband, David M. Devendorf, the income to provide a scholarship in the College of Physicians and Surgeons. Established 1911.	DE WITT (GEORGE G.) SCHOLARSHIP FUND: Gift of Mrs. George G. DeWitt of New York to establish this fund, the net annual income to be awarded as a scholarship by the Faculty of Law to any graduate of Columbia College of good mental and moral standing in his class, who may need such assistance to enable him to pursue the three years course at the Law School and who, in the judgment of the Faculty of Law, shall be worthy of such privilege; provided that the holder of this scholarship shall reside in one of the Residence Halls of the University during his period of study. Established 1917	DIBBLEE (EZRA REED AND FRANCES M.) SCHOLARSHIP FUND: Bequest of Charlotte Dibblee, in memory of her father and mother, the income to provide two scholarships in accordance with the terms of the Will. Established 1933	DITSON (CHARLES H.) ENDOWMENT FUND:  Bequest of Charles H. Ditson, the income to maintain a chair to provide scholarships, fellowships, etc., in Music. Established 1931	DOUGHTY (FRANCIS, M.D.) SCHOLARSHIP FUND: Bequest of Phebe Caroline Swords to establish the 'Francis E. Doughty, M.D., Scholarship Fund' in the College of Physicians and Surgeons, open to members of any class. Established 1912

	RE	PORT OF	тне	TR	EASURER		14
2,000.00	11,500.00	18,000 00	43,500.00	1,460.00	11,500.00	1,325.00	
2,000.00	11,500.00	18,000.00	43,500.00	1,460.00	11,500.00	1,325.00	
DRAPER LIBRARY FUND: Gift of an anonymous donor, the income to be used to maintain the Draper Memorial Collection of books in the Medical School Library. Established 1929	DRISLER CLASSICAL FUND: Gift of Seth Low, formerly President of the University, for the endowment of the 'Henry Drisler Classical Fund' for the purchase of books, maps, charts, busts and such other equipment as will tend to make instruction in the classics more interesting and effective. Established 1894	DU BOIS (DR. ABRAM) MEMORIAL FUND: Gift of William A. Du Bois, Matthew B. Du Bois and Katharine Du Bois, in memory of their father, Dr. Abram Du Bois, the income to be applied to the maintenance of a fellowship to be known as the Doctor Abram Du Bois Fellowship, to be open to a graduate of the College of Physicians and Surgeons devoting himself to the subject of diseases of the eye. Established 1910.	DUNNING (WILLIAM A.) FUND: Bequest of the late William A. Dunning, the income to be applied to the promotion of instruction and research in the Department of History. Established 1923	DWIGHT MEMORIAL RESIDENCE SCHOLARSHIP FUND: Gift of various donors, the income to be used for Scholarships in the Law School. Established 1936.	DYCKMAN FUND: Gift of Isaac Michael Dyckman in memory of his uncles, Dr. Jacob Dyckman of the class of 1810 (M.D. 1813) and James Dyckman of the class of 1811, to establish the 'Dyckman Fund for the Encouragement of Biological Research,' the interest derived therefrom to be devoted annually to such object, consistent with the purposes of the gift, as shall be recommended by the Depart- ment of Zoology and approved by the President. Established 1899	EARLE PRIZE FUND: Gift of the Earle Memorial Committee to establish the Earle Prize in Classics. Established 1907	

At June 30, 1939	\$100,000.00	5,000.00	1,000.00	5,000.00	8,000.00	75,000.00	2,100.00
Additions 1938-1939			:	: : : : : : :			2,100.00
At June 30, 1938	\$100,000.00	5,000.00	1,000.00	5,000.00	8,000.00	75,000.00	2,100.00
	EATON PROFESSORSHIP FUND:  Bequest of the late Dorman B. Eaton to endow and maintain a Professorship of Municipal Science and Administration in the College. Established 1903.	EDSON (HERMAN ALDRICH) SCHOLARSHIP FUND: Bequest of the late Mary Gertrude Edson Aldrich to establish this Fund. Established 1925	EIMER (AUGUST O.) MEDAL FUND: Gift of the classmates and friends of August O. Eimer of the Class of 1906, the income to provide medals for proficiency in swimming under the direction of the Columbia University Athletic Association. Established 1927	EINSTEIN FUND: Gift of Dr. and Mrs. Charles Waldstein, as a memorial to Mrs. Waldstein's parents, Mr. and Mrs. D. L. Einstein, the income of which is to be awarded annually to that graduate student doing the best and most original work in the field of American Diplomacy. Established 1911.	ELLIS (GEORGE ADAMS) SCHOLARSHIP FUND: Gift of George Adams Ellis, the income to provide an annual scholarship in the Law School. Extablished 1927	ELLIS (GEORGE W.) FELLOWSHIP FUND:  Bequest of the late George W. Ellis for Fellowships for graduate students from the State of Vermont. Established 1930	ELSBERG (ALBERT MARION) PRIZE FUND: Gift of Mrs. Albert Elsberg to establish this fund as a memorial to her son, Albert Marion Elsberg, of the Class of 1905, the income to provide the 'Albert Marion Elsberg Prize in Modern History.' Established 1912.

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16,750.00	30,000.00	20,000.00	1,000.00	15,002.85	10,000.00	
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16,750.00	30,000.00	20,000.00	1,000.00	15,002.85	10,000.00	
EMMONS (SAMUEL FRANKLIN) MEMORIAL FUND: Amount collected by the Committee of the Emmons Memorial Fund for a fellowship in Scientific Research. Established 1913	EVANS (HENRY) FELLOWSHIP FUND: Gift of Mrs. Henry Evans in memory of her husband, the late Henry Evans of the Class of 1881, the income to be awarded annually as a fellowship in accordance with the terms and conditions of the gift. Established 1928	EVANS (HENRY) SCHOLARSHIP FUND: Gift of Mrs. Henry Evans in memory of her husband, the late Henry Evans of the Class of 1881, the income to be paid under such rules and regulations as the Trustees may from time to time establish, to an undergraduate in Columbia College entering upon his Freshman year, whose pecuniary condition and resources are, in the judgment of the Faculty, insufficient to defray the cost of his college education. Established 1926.	EWELL (ELLA MARIE) MEDAL FUND:  Bequest of Glover C. Beckwith-Ewell in memory of his wife, Ella Marie Ewell, the income to provide an annual medal in the School of Dental and Oral Surgery. Established 1926	FACULTY HOUSE MAINTENANCE FUND: Created by act of the Trustees on October 5, 1925 by the transfer of the balance of the Schermerhorn (F. Augustus) Bequest, this sum to constitute a special fund, the income to be used for the physical maintenance and upkeep of the Faculty House. Established 1925	FERGUSON (DAVID W. AND ELLEN A.) FELLOWSHIP FUND: Gift of William C. Ferguson of the Class of 1887, School of Mines, to establish a fellowship in the Department of Chemistry, the holder of the fellowship to devote himself to investigation upon the subject of synthetic drugs and medicines. Established 1921	

	At June 30, 1938	Additions 1938–1939	At June 30, 1939
FIELD (OTIS W.) FUND:  Bequest of the late Otis W. Field, the income to be awarded annually to the man of the Junior or Senior Class who, in the judgment of the Dean of the University, shall be deemed most worthy to receive same; basing the award on the good character and fair scholarship of a scholar who is working his way through college and is in need of financial assistance. Established 1930	\$3,000.00		\$3,000.00
FINE ARTS ENDOWMENT FUND: Gift of an anonymous donor to establish this fund for the benefit of the School of Architecture. Established 1913.	517,836.52	\$21,231.30	539,067.82
FOX (RICHARD H.) MEMORIAL PRIZE FUND: Gift of Mr. and Mrs. Leon S. Fox. the income to provide the Fox Prize in the College. Established 1927.	561.00		561.00
FRIENDS OF THE LIBRARY FUND: Representing the amount of life memberships. The income to be used for the current expenses of the organization. Established 1936	760.35		760.35
GARIBALDI (GUISEPPE) MEMORIAL FUND: Gift of the Italian Government, the income to defray the tuition expenses of worthy students who plan to specialize in the study and teaching of Italian. Established 1932	10,000.00		10,000.00
GARTH MEMORIAL FUND: Gift of Horace E. Garth to establish a fellowship in Political Economy in memory of his son, the late Granville W. Garth. Established 1904.	16,500.00		16,500.00
GEBHARD FUND:  Bequest of Frederick Gebhard to found a Professorship of German Language and Literature.  Established 1843	20,000.00		20,000.00

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1,250.00	10,000.00	30,392.29	125.00	50,500.00	2,400.00	30,000.00	18,425.00
		452.56	00.09			: : : : : : : :	18,425.00
1,250.00	10,000.00	29,939.73	65.00	50,500.00	2,400.00	30,000.00	18,425.00
GERMAN LECTURE FUND: Gift for an endowment for Public Lectures in German at the University, the income to be used for advertising, printing, slides, etc. Established 1901	GIBSON (WILLIAM HENRY) SCHOLARSHIP FUND: Gift of Mrs. Honora Gibson Pelton in memory of her father, William Henry Gibson, of the Class of 1875, the income to be awarded annually as a scholarship in accordance with the terms and conditions of the gift. Established 1927.	GIES (WILLIAM J.) FELLOWSHIP FUND: Gift of the William J. Gies Fellowship Fund Committee to establish a fellowship in Dental and Medical research. Established 1923	GIFFORD (RALPH WALDO) SCHOLARSHIP FUND: Gifts of Various Alumni to establish a scholarship Fund. Established 1937	GILDER (RICHARD WATSON) FUND FOR THE PROMOTION OF GOOD CITIZENSHIP: Contributions by the friends of the late Richard Watson Gilder to establish this fund in his honor, the income to be used to enable succeeding classes of students to devote themselves as 'Gilder Fellows' to the investigation and study of political and social conditions in this country and abroad, etc. Established 1911	GLADNEY (FRANK Y.) DORMITORY ROOM ENDOWMENT FUND: Gift of Frank Y. Gladney, a member of the Class of 1902, the income to be used each year for the cost of a dormitory room for a deserving Law School Senior. Established 1937	GOLDSCHMIDT (SAMUEL ANTHONY) FELLOWSHIP FUND: Girt of George B. Goldschmidt, to establish this fund, as a memorial to Samuel Anthony Goldschmidt, of the Class of 1871, the income to be used for the maintenance of a fellowship in Chemistry. Established 1908.	GOTTHEIL (GUSTAV) LECTURESHIP FUND: Gift from Temple Emanu-El to establish a lectureship, the holder of which is to be nominated by the Professors in the Department of Semitic Languages, subject to confirmation by the Trustees. Established 1903

	At June 30,	Additions	At June 30,
	1938	1938-1939	1939
GOTTSBERGER (CORNELIUS HEENEY) FELLOWSHIP FUND:  Bequest of Ellen Josephine Banke to establish a fellowship to bear the name and be in memory of her deceased brother, Cornelius Heeney Gottsberger. Established 1904.	\$9,500.00		\$9,500.00
GOULD (EDWIN J.) FUND: Gift of Edwin J. Gould, the income to be used toward the expenses of the Columbia University Rowing Crews. Established 1933.	6,992.00		6,992.00
GREEN PRIZE FUND: Gift of Mr. and Mrs. Asher Green to establish this fund, in memory of their son, a member of the Class of 1914, the income to provide the Green Prize in the College. Established 1913	1,000.00		1,000.00
GRIFFITHS (WILLIAM E.) FUND:  Bequest of the late William E. Griffiths, for the general purposes of the College of Physicians and Surgeons. Established 1936	19,755.55	\$1,295.93	18,459.62
GROSVENOR (ROBERT) MEMORIAL FUND: Gift of Mr. William Grosvenor of Providence, R. I., in behalf of his mother and her family, in memory of Robert Grosvenor, deceased, a former member of the Class of 1918 in the Medical School, the income to be used for the purchase of books for the library at the Medical School. Established 1920.	2,500.00	(Declease)	2,500.00
HALL (GEORGE HENRY) FUND:  Bequest of the late George Henry Hall to establish this fund, the income of which is to be used to maintain continuously one scholar in the University for the full term of four years, such scholar to be selected by the Trustees. Established 1913	14,500.00		14,500.00
HAMILTON (JOHN CHURCH) FUND:  Bequest of Miss Adelaide Hamilton to be set apart as a fund for the purchase of books, as a memorial to her father, John Church Hamilton, a son of Alexander Hamilton, a proper book-plate to be set in each volume purchased with the income of the fund. Established 1917	1,000.00	1,000.00	1,000.00

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1,130,561.84	600,000.00	1,312,763.96	119,000.00	144,399.64	10,000.00	31,400,00	6,000.00
1,130,561.84	600,000.00	1,312,763.96	119,000.00	144,399.64	10,000.00	31,400.00	6,000.00
HARKNESS (EDWARD S.) FUND: Gift of Edward S. Harkness, the income to be used for medical education and research. Established 1922	HARKNESS (EDWARD S.) FUND FOR DEPARTMENT OF SURGERY: Gift of Edward S. Harkness, the income to be used for the department of Surgery in accordance with the terms of the gift. Established 1930	HARKNESS (MRS. STEPHEN V.) FUND: Gift of Mrs. Stephen V. Harkness, the income to be used for medical education and research. Established 1922.	HARRIMAN (REVEREND ORLANDO) FUND: Gift of the children of the late Reverend Orlando Harriman, of the Class of 1835, as a memorial to their father, the income until further action by the Trustees, to be applied to the salary of the Professor of Rhetoric and English. Established 1908	HARRIS (ELLEN C.) FUND:  Bequest of the late Ellen C. Harris for the erection and endowment of a building as a memorial to her mother, the late Evelina M. Harris. Established 1922.	HARRISON (JAMES RENWICK) SCHOLARSHIP FUND: Bequest of James Renwick Harrison of the Class of 1917 to the Athletic Association, the income to be used for the James Renwick Harrison Scholarship in accordance with a plan to be approved by Mrs. Harrison, his mother. Established 1932.	HARSEN SCHOLARSHIP FUND: Founded by the late Jacob Harsen, M.D., in 1859, the income to be given in prizes. Under an order of the N. Y. Supreme Court in 1903, the income is thereafter to be used for scholarships in the Medical School, to be known as the Harsen Scholarships.	HARTLEY (FRANK) SCHOLARSHIP FUND: Gifts from friends of the late Frank Hartley, M.D., to endow a scholarship in the College of Physicians and Surgeons, as a memorial. Established 1914

	At June 30, 1938	Additions 1938–1939	At June 30, 1939
HAUGHTON (PERCY D.) MEMORIAL FUND: Gift of the Haughton Memorial Committee in memory of the late Percy D. Haughton, the income to be applied to the rental and maintenance of a specified room in John Jay Hall to be known as the Haughton Memorial Room. Established 1926.	\$6,614.45		\$6,614.45
HAYS (WALTER) MEMORIAL FUND: Gift of Mrs. Walter Hays, the income to be used for the promotion of research at the College of Physicians and Surgeons. Established 1929.	1,000.00		1,000.00
HEMINGWAY (W. H.) SCHOLARSHIP FUND: Gift of William Herbert Hemingway, to be used for the Hemingway Scholarships in Medicine. Established 1928.	83,817.00		83,817.00
HEPBURN (A. BARTON) ENDOWMENT FUND: Gift of A. Barton Hepburn, formerly a trustee of the University, the income to be applied, as the Trustees may from time to time provide, to the maintenance and conduct of the School of Business. Established 1918.	910,000.00		910,000.00
HEPBURN (A. BARTON) PROFESSORSHIP FUND:  Bequest of the late A. Barton Hepburn, formerly a trustee of the University, to found or aid in founding a professorship in either economics or history. Established 1922	150,000.00		150,000.00
HERVEY (WILLIAM ADDISON) MEMORIAL SCHOLARSHIP FUND: Gift of William Addison Hervey Memorial Committee, the income to provide a scholarship in the department of Germanic Languages. First awarded October 1, 1925, and biennially thereafter. Established 1924.	3,510.00		3,510.00
HOLT (L. EMMETT) FELLOWSHIP FUND: Bequest of Dr. L. Emmett Holt to establish a fellowship for the study of the diseases of children. Established 1925	24,500.00		24,500.00

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12,500.00	5,000.00	110,420.22	5,000.00	5,000.00	5,000.00	5,000.00	2,300.00	
\$2,500.00	5,000.00	:	: : : : : : :					
10,000.00		110,420.22	5,000.00	5,000.00	5,000.00	5,000.00	2,300.00	
HORN (JAMES T.) SCHOLARSHIP FUND: Gift of Sarah L. and Mary T. Horn to establish this Fund. Established 1935	HORN (JAMES T.) SCHOLARSHIP FUND IN THE SCHOOL OF ENGINEERING: Gift of Sarah L. and Mary T. Horn, the income to be available for the assistance of a student in that School. Established 1938	HOW (HALL J.) FUND:  Bequests of the late Minnie How, Mary How Steffens and John Gordon How in memory of their father Hall J. How, the income to provide a professorship. Established 1936	HUBER (FRANCIS) SCHOLARSHIP FUND: Gift of Francis Huber to establish a scholarship to be awarded to a student entering the Medical School from an institution other than Columbia College, Barnard College or Hunter College. Established 1921.	HUBER (FREDERICK W., Jr.) SCHOLARSHIP FUND: Gift of Dr. Frederick W. Huber to establish a scholarship to be awarded, under the terms of the gift, to a student in the first or freshman year in Columbia College. Established 1924	HUBER (JOSEPH AND CHRISTINA) MEDICAL LIBRARY FUND: Gift of Francis Huber, the income to be expended for the purchase of books on internal medicine. Established 1929	HUBER (VIOLA B.) SCHOLARSHIP FUND: Gift of Francis Huber to establish a scholarship to be awarded to a student entering the Medical School from Hunter College. Established 1921.	HLLIG FUND:  Bequest of William C. Illig, of the Class of 1882 School of Mines, the income to be applied to the purchase of prizes to be awarded to students of the graduating class of the School of Mines who shall, in the judgment of the Faculty, have merited the same by commendable proficiency in such scientific subjects as the Faculty may designate. Established 1898	

At June 30, 1939	\$15,000.00	5,562.99	105.10	396.00	4,058.22	9,899.36
Additions 1938–1939		\$50.00			159.83	98.998.36
At June 30, 1938	\$15,000.00	5,512.99	105.10	396.00	3,898.39	
	INDO-IRANIAN FUND: Gift of an Anonymous Donor to found this Fund, the income to be used for the maintenance of the Department of Indo-Iranian Languages Established 1908	INSTITUTO DE LAS ESPANAS ENDOWMENT FUND: Gift of various donors, the income to be applied toward the maintenance of the Instituto de las Espanas. Established 1930	INSTITUTO DE LAS ESPANAS PERMANENT FUND, FELLOWSHIP INTERCOLLEG-IATE ALLIANCE: Gift of various donors, the income to be applied toward the maintenance of the Instituto de las Espanas. Established 1930	INTERCOLLEGIATE CHESS LEAGUE FUND: Established by the transfer of a gift, the income to be expended through King's Crown for the chess teams. Established 1932	ITALIAN SOCIETIES ENDOWMENT FUND:  Gift of the Italian Societies, the income to be added to the principal until such time as the principal shall amount to \$100,000, the income then to be used for the support of scholarships for students in Italian or for support of research and general studies in the field of Italian literature, the sciences, history and art. Established 1934.	JACKSON (A. V. WILLIAMS) FEILOWSHIP FUND IN INDO-IRANIAN LANGUAGES AND LITERATURES:  Created by act of the Trustees on January 9, 1939, by the transfer of the balance remaining on July 1, 1938 in the gifts received from Alexander Smith Cochran and from Dr. and Mrs. Frederic S. Lee; the fund to be administered in accordance with the suggestions set forth in Mrs. Jackson's letter addressed to the President under date of December 21, 1938. Established 1939

JACOBI (ABRAHAM) LIBRARY FUND: Gift of Francis Huber, the income thereof to be expended for the purchase of books and journals on pediatric subjects for the Library of the Medical School. Established 1921	5,025.00	5,025.00
JACOBI (ABRAHAM) SCHOLARSHIP FUND: Gift of Francis Huber to establish four scholarships, two of which shall be awarded to students entering the Medical School from Columbia College and two to students entering the Medical School from the College of the City of New York. Established 1921	20,000.00	20,000.00
JAMES (WALTER BELKNAP) RESEARCH FELLOWSHIP FUND: Bequest of Dr. Walter B. James, the income to be used for the benefit of the College of Physicians and Surgeons. Established 1927. Augmented in 1928 by gift of Mrs. Walter B. James, \$25,000.00.	50,000.00	50,000.00
JAMES (D. WILLIS) FUND:  Bequest of D. Willis James, the income to be applied until further action by the Trustees, to the salary of the Professor of Geology. Established 1908	100,000.00	100,000.00
JANEWAY (E. G.) LIBRARY ENDOWMENT FUND: Gift of Mrs. Russell Sage to establish the E. G. Janeway Library Endowment Fund, the income of which is to be devoted to the maintenance and extension of the Janeway Library in the College of Physicians and Surgeons. Established 1912.	26,750.00	26,750.00
JANEWAY PRIZE FUND:  Bequest of Mailda S. J. Wisner, the income to be awarded annually to the student graduating from the College of Physicians and Surgeons, with the highest marks for efficiency and ability.  Established 1933.	1,000.00	1,000.00
JEFFERSON STATUE MAINTENANCE FUND: From the Executors of the Estate of Joseph Pulitzer, the income to be used for the care and repair of the Statue of Thomas Jefferson. Original gift, \$1,589.92 to which has been added accrued income \$210.08. Established 1917.	1,800.00	1,800.00

	At June 30, 1938	Additions 1938–1939	At June 30, 1939
JOHNSTON (EDWARD W. S.) FUND: Bequest of Mrs. Anna A. Johnston, the income to be used for the upkeep of the Scudder-Johnston collection in the Library. Established 1926.	\$2,000.00		\$2,000.00
JONES (ADAM LEROY) MEMORIAL PRIZE FUND: Gift of Mrs. Lily S. Murray Jones, the income to provide a prize in Logic and the Methods of Science. Established 1934.	1,100.00		1,100.00
KELLETT (EURETTA J.) FELLOWSHIP FUND: Bequest of Euretta Jane Schlegel, to establish fellowships for the study of letters at Oxford or Cambridge University, England. Established 1931	210,588.08		210,588.08
KEMP (JAMES FURMAN) FUND: Gift of an Anonymous Donor, the income to be exclusively for the benefit of the Department of Geology and to be used for fellowships, scholarships, loans to students or research. Established 1924.	20,000.00		20,000.00
KEMP (JAMES FURMAN) MEMORIAL FUND FOR RESEARCH AND PUBLICA-			
Gift of former students and friends of the late Professor James Furman Kemp and others interested in scientific research, the income and under exceptional circumstances portions of principal, to be expended in support of research and publication in Geology, in accordance with the deed of Gift. Established 1936	40,000.00	\$189.00	40,189.00
KENDALL (EDWARD HALE) FUND:  Bequest of the late Edward Hale Kendall, the income to provide a scholarship or travelling fellowship in the Department of Architecture. Established 1935	34,560.63		34,560.63
KILLOUGH (JAMES H.) SCHOLARSHIP FUND: Bequest of the late Walter H. D. Killough, the income to be used for scholarships in accordance with the terms of the Will. (Principal held by Trustees under the Will.) Established 1930.			

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	15,000.00	1,500.00	5,000.00	1,000.00	5,250.00	40.00	30,000.00
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	15,000.00	1,500.00	5,000.00	1,000.00	5,250.00	40.00	30,000.00
	KOPLIK CHILDREN'S SCHOLARSHIP FUND: Bequest of Henry Koplik in memory of his wife, Stephanie Koplik, the income to be paid every two years to the physician, under thirty years of age, who shall be selected by a committee appointed by the Faculty of the Medical School for having shown special aptitude for original work in the investigation of diseases of children. Established 1928	KUNZ (GEORGE FREDERICK) FUND: Bequest of the late George Frederick Kunz, the income to be used for the purchase of specimens in the Department of Mineralogy in accordance with the terms of the Will. Established 1935.	LAHEY SCHOLARSHIP FUND:  Bequest of the late Richard Lahey to establish a free scholarship in the School of Science. Established 1932.	LASHER (JOHN K.) FUND: Bequest of the late John K. Lasher, Jr., the income to be applied toward the support of the work of the Columbia University Christian Association. Established 1920	LAW LIBRARY FUND: Created by act of the Trustees on March 5, 1900, by the consolidation of the Alexander Cole gift (\$1,500), John J. Jenkins Legacy (\$500), John McKeon Fund (\$1,000), Samson Simpson Fund (\$1,000) and Edgar J. Nathan Gift (\$250), the income to be applied to the purchase of law books. Augmented by act of the Finance Committee, October 2, 1907, by adding the Pyne Law Gift (\$1,000).	LAW SCHOLARSHIP FUND: Gift of various donors, the income to be used for scholarships. Established 1938	LEE FUND: Gift of Dr. and Mrs. Frederic S. Lee to establish this fund, the income to be used to meet the cost of equipment and research in the Department of Physiology. Established 1914. Original gift \$20,000.00. Augmented in 1928 by \$10,000.00.

	At June 30, 1938	Additions 1938-1939	At June 30, 1939
LEGISLATIVE DRAFTING RESEARCH FUND: Gift of Joseph P. Chamberlain, the income to be used for the expenses of the Bureau having to do with legislative drafting. Established 1938.	\$130,812.85	\$721.00	\$131,533.85
LIBBEY (JONAS M.) FUND:  Bequest of the late Jonas M. Libbey, the income to be used to promote and support research and to publish and distribute the results of such research in regard to the application of the principles of biological and pathological chemistry, and of electro-chemistry and electro-physics to human need and welfare. Established 1923.	216,764.00		216,764.00
LODGE (STANDWOOD COCKEY) FOUNDATION: Gift of an Anonymous Donor the income to be paid to the donor during his lifetime, to his wife after his death and thereafter for the publication of works in Classical Philology and Literature. Established 1930	90,127.83	1,994.59	88,133.24
LOEB (JAMES) FUND: Bequest of James Loeb, the income to be used to maintain the Labor Library. Established 1934.	5,000.00	(Decrease) 175.21	5,175.21
LOUBAT FUND: Gift of Joseph F. Loubat for prizes to be given every five years for works in the English Language on the History, Geography, Archaeology, Ethnology, Philology or Numismatics of North America. First Prize, \$1,000; second prize, \$400. Established 1892	12,000.00		12,000.00
LOUBAT PROFESSORSHIP FUND: Gift of Joseph F. Loubat to establish the Loubat Professorship in American Archaeology. Established 1903.	100,000.00		100,000.00
LYDIG FELLOWSHIP FUND:  Bequest of Hannah M. Lydig, for the endowment and maintenance of a Fellowship. Established 1931.	40,000.00	40,000.00	40,000,00

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6,000.00	5,000.00	3,000.00	10,000.00	5,000.00	10,000.00	50,000.00	
		:					
6,000.00	5,000.00	3,000.00	10,000.00	5,000.00	10,000.00	50,000.00	
MACMAHON (KATHERINE) SCHOLARSHIP FUND:  Bequest of the late Katherine MacMahon, the income to be awarded to the first year student in Journalism deemed most worthy by the Faculty of that School as a help for further study in the School of Journalism during the following year. Established 1925. Bequest \$1,500.00 aug- mented by gifts from Mrs. Louise Ewing Dexter. \$4,500.00	MAISON FRANCAISE ENDOWMENT FUND: Gift of Robert Bacon, the income to be used in defraying the running expenses of the Maison Francaise. Established 1913	MANNERS (EDWIN) FUND: Legacy of the late Edwin Manners, the income to be applied to the purchase of books on the English Language and Literature. Established 1914	MARKOE (FRANCIS HARTMAN) SCHOLARSHIP FUND: Bequest of Madeline Shelton Markoe in memory of her husband Francis Hartman Markoe, the income to be awarded annually to a student in the College of Physicians and Surgeons. Estab- lished 1929.	MARLING (ALFRED E.) SCHOLARSHIP FUND: Bequest of the late Alfred E. Marling, the income to be applied toward scholarships in accordance with a resolution adopted by the Trustees on March 7, 1938. Established 1938	MASON (WILLIAM) MUSICAL SCHOLARSHIP FUND: Bequest of Mina Mason Van Sinderen, the income to be applied toward the education and support of needy and worthy students in Music, or to the purchase of books for the University Library of Music, or as a prize for musical composition or otherwise for the advancement of the art of music in the discretion of the Trustees. Established 1933	MATHEWS LECTURESHIP FUND:  Bequest of Charles T. Mathews to establish a lectureship in the School of Architecture, said lectureship to consist of ten lectures during each and every school year on the "History of Gothic Architecture." Established 1934.	

At June 30, 1939	\$75,114.69	13,225.16	5,000.00	27,450.00	25,000.00	89,004.22	
Additions 1938–1939		\$282.31				664.45	
At June 30, 1938	\$75,114.69	12,942.85	5,000.00	27,450.00	25,000.00	88,339.77	
	MATTHEWS (JAMES BRANDER) FUND FOR THE DRAMATIC MUSEUM: Bequest of the late James Brander Matthews for the maintenance and enlargement of the Brander Matthews Dramatic Museum. Established 1930.	MAYER (RALPH EDWARD) FUND:  Contributions by the friends of the late Professor Ralph Edward Mayer to establish this fund to perpetuate the memory of his constant devotion to the University and of his unselfish service to the Alumni, the income to be used for a scholarship or loan fund for the benefit of deserving students in the Schools of Mines, Engineering and Chemistry who may be in need of assistance. Established 1924.	McANENY (MARJORIE) SCHOLARSHIP FUND: Gift of Francis Huber to establish a scholarship to be awarded to a student entering the Medical School from Barnard College. Established 1921	McCLYMONDS (LOUIS K.) SCHOLARSHIP FUND: Bequest of Mrs. Annie M. McClymonds in memory of her husband, Louis K. McClymonds, the income to provide scholarships to young men of limited means receiving the relative highest standing in the entrance examinations in Columbia College. Established 1926	McKIM FELLOWSHIP FUND: Gift of Charles F. McKim for two traveling fellowships in the Department of Architecture. The fellowships are awarded in odd-numbered years. Established 1889	MEAD (WILLIAM RUTHERFORD) FUND:  Proceeds of a Trust Fund established by William Rutherford Mead on May 25, 1920, the income to be used toward the cost of maintenance of the School of Architecture. Established 1936	

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12,340.00	10,000.00	7,000.00	1,000.00	7,000.00	1,000.00	1,050.00	1,600.00
	: : : : : : : :						1,600.00
12,340.00	10,000.00	7,000.00	1,000.00	7,000.00	1,000.00	1,050.00	1,600.00
MEDICAL SCHOOL EQUIPMENT FUND:  Created by act of the Committee on Finance on October 31, 1922, by the transfer of \$12,340 received from the United States Government on account of the cost of equipment received from the Columbia War Hospital, this sum to constitute a special fund for the purchase of equipment for the Medical School, the income of which, and if necessary any portion of the principal, to be expended as may be needed under the direction of the Trustees. Established 1924	MEGRUE (ROI COOPER) EMERGENCY LOAN FUND: Bequest of Stella Cooper Megrue, the income to be loaned to deserving students. Established 1928.	MEGRUE (ROI COOPER) SCHOLARSHIP FUND:  Bequest of Stella Cooper Megrue, the income to be awarded annually as a scholarship in accordance with the terms and conditions of the gift. Established 1928	MEGRUE (STELLA COOPER) FUND:  Bequest of Stella Cooper Megrue, the principal or income to be expended for the support and maintenance of the basketball team in such manner as the Trustees may direct. Established 1928	MEGRUE (STELLA COOPER) SCHOLARSHIP FUND:  Bequest of Stella Cooper Megrue, the income to be awarded annually as a scholarship in accordance with the terms and conditions of the gift. Established 1928.	MEIERHOF (DR. HAROLD LEE) MEMORIAL PRIZE FUND: Gitt of Dr. and Mrs. Edward Lee Meierhof, as a memorial to their son, Dr. Harold Lee Meierhof, the income of which is to be awarded annually, in recognition of some meritorious piece of re- search accomplished in the Department of Pathology. Established 1921	MEMBER OF THE CLASS OF 1885 FUND: Gift of Grant Squires, of the Class of 1885, the income to be awarded every five years to defray the expenses of a sociological investigation that promises results of a scientific value. Established 1895.	MERGENTIME (JAMES HENRY) FUND:  Bequest of the late James Henry Mergentime to be used at the discretion of the Trustees to promote the study of organic chemistry. Established 1930.

	At June 30, 1938	Additions 1938-1939	At June 30, 1939
MICHAELIS (DR. ALFRED MORITZ) PRIZE FUND: Gift of Mrs. Jeanette Michaelis, to establish this fund, the income to be awarded annually to a student in Columbia College for proficiency in certain designated courses in Physics. Established 1926.	\$1,000.00		\$1,000.00
MILLER (GUY B.) FUND: Bequest of the late Guy B. Miller, of the Class of 1898, College of Physicians and Surgeons, for the general purposes of the Medical School. Established 1904	10,000.00		10,000.00
MILLER (NATHAN J.) FUND: Gift of Mrs. Nathan J. Miller, in memory of her husband, Nathan J. Miller, to found a Chair in Jewish History, Literature and Institutions. Established 1928	268,000.00		268,000.00
MITCHEL (JOHN PURROY) MEMORIAL FUND:  Bequest of the late Mary Purroy Mitchel, the income to be used for the sole purpose of assisting one or more young men of American birth and citizenship enrolled as regular undergraduate students in Columbia College. Established 1938.		\$54,144.40	54.144.40
MITCHELL (WILLIAM) FELLOWSHIP FUND: Bequest of the late Benjamin D. Stillman to establish, in honor and memory of his friend, William Mitchell, deceased, the William Mitchell Fellowship Fund in Letters or Science. Established 1908.	10,000.00		10,000.00
MOFFAT SCHOLARSHIP FUND: Bequest of William B. Moffat, M.D., of the Class of 1838, 'for the purpose of one or more scholar- ships for the education and instruction of one or more indigent students.' Established 1862	2,000.00		2,000.00
MONTGOMERY (ROBERT H.) PRIZE FUND:  Gift of Robert H. Montgomery to establish this fund, the income to be awarded as a prize to the member of the graduating class of the School of Business who has specialized in Accounting and who is deemed by the staff of the School of Business to be most proficient in all courses. Established 1916.	2,010.00	2,010.00	2,010.00

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12,500.00	50,000.00	7,500.00	25,000.00	5,000.00	5,000.00	200,000.00	25,000.00	103,779.27
- - - - - - - - - - - - - - - - - - -								103,779.27
12,500.00	50,000.00	7,500.00	25,000.00	5,000.00	5,000.00	200,000.00	25,000.00	103,779.27
MORRIS (AUGUSTUS NEWBOLD) FUND: Gift of Newbold Morris, of the Class of 1891 Law, in memory of his father Augustus Newbold Morris, of the class of 1860, the income to provide a fellowship for an advanced student of Public or Private Law who may be a candidate for the degree of Doctor Juris. Established 1924	MORROW (DWIGHT W.) FUND FOR THE LAW SCHOOL: Bequest of Dwight W. Morrow, the income to be used for the School of Law. Established 1932	MOSENTHAL FELLOWSHIP FUND: Gift of the friends of the late Joseph Mosenthal, to found a fellowship in Music. Established 1898.	MURRAY (GEORGE W.) FUND: Gift of George Welwood Murray, of the Class of 1876 Law, to establish this fund, the income to be used for Research in Legal History. Established 1924	MURTHA (THOMAS F.) SCHOLARSHIP FUND: Gift of Clara W. Murtha, Raymond W. Murtha and Thomas V. Murtha, the income to be used for the benefit of needy students in the School of Law. Established 1932.	NEWBERRY (JOHN S.) PRIZE FUND:  Bequest of the late Bashford Dean, the income to be awarded annually as the John S. Newberry Prize, in the Department of Zoology. Established 1929	NIVEN (ROBERT JOHNSTON) FUND: Bequest of the late Charlotte E. de Sers in memory of her father, Robert Johnston Niven, to endow a chair in such branch of learning as the Trustees may decide. Established 1930	OCHS (ADOLPH S.) FUND: Bequest of the late Adolph S. Ochs to establish this fund. Established 1936	OPENHYM RESEARCH FUND:  Bequest of the late Augustus W. Openhym, the income to be used for research into the cause, prevention and cure of cancer. Established 1936

At June 30, 1939	\$3,050.00	50,000.00	30,000.00	30,000.00	2,731.73	5,700.00	15,000.00
Additions 1938–1939					\$107.59		
At June 30, 1938	\$3,050.00	50,000.00	30,000.00	30,000.00	2,624.14	5,700.00	15,000.00
	ORDRONAUX (JOHN) FUND:  Bequest of Dr. John Ordronaux, to establish prizes in the Law School, to be presented annually.  Established 1909.	OTTMANN (MADELEINE L.) RESEARCH FUND:  Bequest of Madeleine L. Ottmann, the income or principal to be used for research in the Department of Neurology. Established 1931	PARKER FUND FOR INSTITUTE OF INTERNATIONAL AFFAIRS: Established by the transfer of \$30,000 from a gift for the same purpose, the income to be used for the current expenses of the Institute of International Affairs. Established 1937	PATERNO LIBRARY ENDOWMENT FUND: Gift of Carlo M. Paterno and Dr. Charles V. Paterno, the income to be used for the purchase of books and the binding thereof for the Paterno Library in the Casa Italiana, etc. Established 1938	PEELE (ROBERT) PRIZE FUND: Git of E. E. Olcott, the income to be given annually to a member of the graduating class in Mining and Metallurgical Engineering who shall have shown the greatest proficiency in his course of study. Established 1925.	PERKINS FELLOWSHIP FUND:  Bequest of Willard B. Perkins, the income to be expended every four years for a travelling fellowship in the Architectural Department. Established 1898	PERKINS (EDWARD H., Jr.) SCHOLARSHIP FUND:  Bequest of Norton Perkins in memory of his father, Edward H. Perkins, Jr., the income to provide a scholarship in History or Economics. Established 1926

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66,500.00	20,000.00	79,590.38	12,514.00	1,000.00	1,500.00	1,176,848.57	
		.70				:	
66,500 00	20,000.00	79,589.68	12,514.00	1,000.00	1,500.00	1,176,848.57	
PETERS (WILLIAM RICHMOND, Jr.) FUND FOR ENGINEERING RESEARCH: Gift of Mr. and Mrs. William R. Peters to establish this fund as a memorial to their son, William Richmond Peters, Jr., of the Class of 1911, Civil Engineering, the income of which is to be applied to the work of research in the Department of Civil Engineering. Established 1912	PHILLIPS (HARRIET S.) FUND:  Bequest of Harriet S. Phillips, the income to be used for Scholarships in the School of Journalism.  Established 1931	PHILLIPS (HARRIET S.) FUND FOR BARNARD COLLEGE: Bequest of Harriet S. Phillips, the income to be used for any purpose of Barnard College. Established 1931	PHILLIPSON (BRAINERD F.) SCHOLARSHIP FUND: Gift of an anonymous donor, the income to provide a scholarship in the School of Engineering in accordance with the terms of the gift. Established 1936	PHILOLEXIAN CENTENNIAL WASHINGTON PRIZE FUND: Gift of the Philolexian Society from J. Ackerman Coles, of the Class of 1864, the accumulated income to be expended every four years for a duplicate of the life-size bronze bust of George Washington, modeled from life at Mount Vernon, by Jean Antoine Houdon. Bust to be cast at the Barbadienne Foundry, Paris, France, and to be given to that member of the Philolexian Society, who, in the opinion of the President of the University, the President of the Society, and a third man of their choosing, shall be deemed most worthy, upon his delivery of an original patriotic address. Established 1902.	PHILOLEXIAN PRIZE FUND: From the Philolexian Society, the income to be paid to the Society for prizes. Established 1904	PHOENIX FUND:  Bequest of the late Stephen Whitney Phoenix, the income to be used for the purpose of scientific instruction and research. Established 1881.	

At June 30, 1939	\$10,000.00	6,000.00	29,554.95	5,000.00	19,500.00	15,000.00
Additions 1938–1939			\$700.00			
At June 30, 1938	\$10,000.00	6,000.00	28,854.95	5,000.00	19,500.00	15,000.00
	PIERRE (CHARLES AND LILLIAN) EDUCATIONAL FUND: Gift of Lillian Pierre, the income to be used for the promotion of the work of the Department of Urology at the Medical School. Established 1934	PLUMMER (MARY WRIGHT) SCHOLARSHIP FUND: Gift of the Alumni Association of the Library School of the New York Public Library to establish a scholarship in the School of Library Service. Established 1932	PORTER (DAVID B. AND WIFE) MEMORIAL FUND: Bequest of the late Thekla B. Porter, the income to be loaned to worthy students in the Law School. Established 1936	PRENTICE FUND FOR ROWING: Established by transfer of the Prentice Gift for Rowing received in 1926, the income to be paid to the Athletic Association for the support of rowing. Established 1929	PRESIDENT'S HOUSE (FURNISHING AND EQUIPMENT) FUND:  Created by act of the Trustees on November 6, 1922, by the transfer of \$13,415.13 remaining in the anonymous gift of \$30,000.00 reported to the Trustees on March 6, 1911, and increased from the general funds of the University to \$20,000.00, this sum to constitute the principal of a special fund for the furnishing and equipment of the President's House, the income of which, and if necessary any portion of the principal, to be expended as may be needed under the direction of the President. Established 1922.	PROUDFIT (ALEXANDER MONCRIEF) FELLOWSHIP FUND: Bequest of the late Alexander Moncrief Proudfit, of the Class of 1892, to found a fellowship for the encouragement of study in English Literature, to be known as the 'Alexander Moncrief Proudfit Fellowship in Letters, to be held only by such persons as, being the sons of native-born American parents, shall have taken the degree of Bachelor of Arts after a three years residence in Columbia College, and shall, while enjoying such fellowship, or the income thereof, remain unmarried. Established 1899.

15,000.00	100,000.00	1,300,000.00	550,000.00	310,000.00	6,837.13	13,674.27	
					6,837.13	13,674.27	
15,000.00	100,000.00	1,300,000.00	550,000.00	310,000.00			
PROUDFIT (MARIA MCLEAN) FELLOWSHIP FUND IN MEDICINE: Bequest of the late Alexander Moncriet Proudfit, of the Class of 1892, to found a fellowship to be known as the 'Maria McLean Proudfit Fellowship,' to be held only by such persons, as being the sons of native-born American parents, shall, under the direction of the Medical Faculty of Columbia College, pursue advanced studies in Medicine, and shall, while enjoying such fellow- ship, or the income thereof, remain unmarried. Established 1899	PSYCHOLOGY FUND: Gift of John D. Rockefeller, as an endowment of the head professorship of the Psychological Department of Columbia University. Established 1899	PULITZER (JOSEPH) FUND FOR SCHOOL OF JOURNALISM: Gift from Joseph Pulitzer to establish and endow a School of Journalism in Columbia University. Established 1903	PULITZER PRIZE FUND: Gift of Joseph Pulitzer, the income to be used for prizes in accordance with the terms of the gift. Established 1903	PULITZER SCHOLARSHIP FUND: Gift of \$100,000 by Joseph Pulitzer to found thirty scholarships for graduates of Gity Grammar Schools, one-half the sum to be used on improvements on the new site at 116th St. Established 1893. Augmented in 1912.	RAYMOND (ROBERT M.) FUND FOR RELIGIOUS AND SOCIAL WORK:  Bequest of Robert M. Raymond, the income to be used for the Benefit of the Religious and Social work of the University. Established 1939	RAYMOND (ROBERT M.) FUND FOR UNIVERSITY MEDICAL OFFICE: Bequest of Robert M. Raymond, to be used in connection with the work done by the Resident Physician and his assistants on the campus. Established 1939	

At June 30, 1939	\$2,500.00	5,000.00		3,131.00	2,924.73	500.00	5,400.00	
Additions 1938–1939				\$75.28	2,924.73			
At June 30, 1938	\$2,500.00	5,000.00		3,055.72		500.00	5,400.00	
	RECKFORD (LOUIS J.) FUND: Gift of Miss Adelaide Reckford in memory of her father, Louis J. Reckford, of the Class of 1886, the income to be used for the purchase of books and other illustrative material for the University Library. Established 1929.	REISINGER (HUGO) FUND:  Bequest of the late Hugo Reisinger, the income to be applied in the discretion of the Trustees to the purchase of books, periodicals and other material for instruction and research in matters relating to the German peoples. Established 1919.	REUSSNER (ELLA) FUND:  Bequest of Ella Reussner, the income to be used for such purposes as the Trustees may direct. (Principal held by the Trustees under the Will.) Established 1939.	RHODES (F. B. F.) SCHOLARSHIP FUND: Gift of E. E. Olcott in memory of his classmate, Francis Bell Forsyth Rhodes, School of Mines, '74, to establish this fund, the income to be awarded on Commencement Day of each year to a member of the graduating class in Metallurgy, in accordance with the terms of the gift. Established 1926.	RITCHIE (PETER C., JR.) SCHOLARSHIP FUND: Bequest of Virginia J. Ritchie to establish a scholarship in Columbia College. Established 1939	ROBINSON (MEYER R.) FUND:  Bequest of Meyer R. Robinson, the income to be used in support of medical research. Established 1937	ROGERS (HOWARD MALCOLM) SCHOLARSHIP FUND: Bequest of the late Henrietta Rogers to establish this Fund. Established 1925	

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1,000.00	3,630.00	30,535.00	12,000.00	10,000.00	12,000.00	
1,000.00	3,630.00	30,535.00	12,000.00	10,000.00	12,000.00	
ROLKER (CHARLES M., Jr.) PRIZE FUND: Gift of Mrs. Charles M. Rolker, the annual income to constitute a prize to be publicly awarded on Glass Day of each year to that member of the graduating class in Columbia College, who in the judgment of his classmates, has proven himself most worthy of special distinction as an undergraduate student, either because of his neutral participation in student activities, or because of pre-eminence in athletic sports. Established 1999.	ROMAINE (BENJAMIN F.) PRIZE FUND: Git of Benjamin F. Romaine to establish a prize for proficiency in the Greek language and litera- ture. Established 1922	ROSS (GEORGE) FUND:  Bequest of the late Catherine A. Ross, the income to be used for the advancement and development of athletics at Columbia University. Established 1923	SACKETT (HENRY W.) FUND:  Bequest of the late Henry W. Sackett, the income to provide two annual scholarships in the School of Journalism. Established 1930	SANDHAM (ANNA M.) SCHOLARSHIP FUND: Bequest of the late Anna M. Sandham to establish a scholarship at Barnard College. Established 1922.	SAUNDERS (ALEXANDER) SCHOLARSHIP FUND: Bequest of the late Mary Ellen Saunders in memory of her husband Alexander Saunders, to establish an undergraduate scholarship for the benefit of an American boy of Scotch, English or Irish parentage, to be nominated by the superintendent, principal and teachers of the Yonkers High School, in Yonkers, N. Y. Established 1922.	

At June 30, 1939	\$73,680.61	12,000.00	162,097.50	10,000.00	8,600.00	
Additions 1938–1939	\$35.00					
At June 30, 1938	\$73,645.61	12,000.00	162,097.50	10,000.00	8,600.00	
	SEAGER (SCHUYLER FISKE) ENDOWMENT FUND:  Bequest of the late Professor Henry R. Seager, the income to be paid to beneficiaries under the Will during their life-time, thereafter the income is to be expended annually for the advance- ment of economic study and research. Established 1932.	SEIDL FUND:  The proceeds of a memorial performance held at the Metropolitan Opera House on March 23, 1899, in honor of the late Anton Seidl, the income of the fund to be paid to Mrs. Seidl during her lifetime, and thereafter to be awarded at least every second year to the most promising candidate, either man or woman, prepared to devote himself, or herself, to the study of musical composition at Columbia University, or eslewhere in this country or abroad.	SHEPHERD FOUNDATION:  Bequest of the late William R. Shepherd, the income to be paid to his widow during her lifetime and thereafter approximately one-half of the income shall be used for the promotion of research and instruction in history; the remaining half for the promotion of the Medical Service of the University as a Faculty Health Fund for members of the teaching staff of the University. Established 1938.	SHOEMAKER (WILLIAM BROCK) FUND: Gift as a memorial to the late William Brock Shoemaker, of the Class of 1902, in Columbia College, established jointly by his wife, Ella de Peyster Shoemaker, and his father, Henry F. Shoemaker, the income to be used for the benefit of self-supporting students. Established 1908	SIMON (THEODORE W.) FUND: Bequest of Theodore W. Simon for the general purposes of the Medical School. Established 1927.	•

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	5,200.00	20,000.00	39,468.00	1,900.00	20,000.00	6,000.00	8,050.00
-	5,200.00	20,000.00	39,468.00	1,900.00	20,000.00	6,000.00	8,050.00
SMITH PRIZE FUND, SCHOOL OF MEDICINE: Ciff of relatives friends and munits of the late Joseph Mather Smith. M.D as a memorial of his	services as Professor in the College of Physicians and Surgeons from 1826 to 1866. An annual prize of \$100 is to be awarded for the best essay on the subject for the year by an alumnus of the College. Established 1894.	SMYTH (DAVID W.) SCHOLARSHIP FUND: Gift of David W. Smyth, of the Class of 1902, the income to be awarded annually as a scholarship to a student in Columbia College whose pecuniary condition and resources are, in the judgment of the Faculty, insufficient to defray the expenses of a collegiate education. Established 1926	SOCIAL AND POLITICAL ETHICS PROFESSORSHIP FUND:  To endow a chair of Social and Political Ethics Established 1918	STEVENS PRIZE FUND, SCHOOL OF MEDICINE: Established by the late Alexander Hodgson Stevens, formerly President of the College of Physicians and Surgeons. The income of the fund is to be awarded every three years for the best medical essay covering original research as determined by the committee in charge of the prize.  Established 1891	STOKES (CAROLINE PHELPS) FUND: Bequest of the late Caroline Phelps Stokes, the income to be used for lectures, prizes or essays by the students of Columbia, Barnard and Teachers Colleges. Established 1910	STUART SCHOLARSHIP FUND: The gift of Mrs. Cornelia A. Atwill, in memory of her grandsons, Sidney Barculo Stuart, of the Class of 1880, and Eugene Tolman Stuart, of the Class of 1881, to found two scholarships in the College, to be known as "Stuart Scholarships." Established 1895	SWIFT MEMORIAL FUND: Gift from the Trustees of the Association of the Alumni of the College of Physicians and Surgeons, representing the principal sum and accrued income as of December 31, 1920, of the Swift Memorial Fund, created in 1883 by Dr. James T. Swift as a memorial to his brother, Dr. Forest Swift, of the Class of 1857. Established 1921.

At June 30, 1939	\$4,000.00	101,697 75	5,900.00	4,200.00	13,500.00	50,000.00	6,182.00
Additions 1938–1939			\$2,000.00				6,182.00
At June 30, 1938	\$4,000.00	101,697.75	3,900.00	4,200.00	13,500.00	50,000.00	
	THE 1884 SCHOOL OF ARTS SCHOLARSHIP FUND: Gift of the Class of 1884, School of Arts, the income to be used in accordance with present practice for a Resident Scholarship to be held by a student in Columbia College. Established 1934	THOMPSON (WILLIAM BOYCE) FUND: Git of William Boyce Thompson, the principal or income to be used under the direction of a committee of five, for the purpose of stimulating interest in the School of Mines, Engineering and Chemistry in accordance with the deed of gift. Established 1936	TODD (HENRY ALFRED) PRIZE FUND: Gift of Mrs. Henry A. Todd, the income to provide an annual prize in French. Established 1936.	TOPPAN PRIZE FUND: Gift of Mrs. Sarah M. Toppan, to establish this fund in memory of her late husband. Robert Noxon Toppan, the income to be used annually in providing the Robert Noxon Toppan Prize in the School of Law. Established 1904.	TROWBRIDGE FELLOWSHIP FUND: Gift of the Alumni Association of the School of Mines as a memorial of the late Professor Trowbridge to establish the 'William Petit Trowbridge Fellowship in Engineering.' Established 1893	TUCKER (ERVIN ALDEN) FUND:  Bequest of the late George Anna Tucker, in memory of her husband, Ervin Alden Tucker, M.D., the income to provide an annual fellowship in Obstetrics. Established 1936	TURNER (CHARLES W.) SCHOLARSHIP FUND: Gift of Wallis S. Turner, of the Class of 1900, to establish, in memory of his father, Charles W. Turner, a scholarship in Columbia College, to aid the education of a needy or deserving student to the end that through the advantages of such education the recipient may aspire to the highest type of American Citizenship. Established 1920

TYNDALL FELLOWSHIP FUND: Gift of the late Professor John Tyndall, of London, the income to be applied to the support of 'American pupils who may have shown decided talent in Physics, etc.' Established 1885	11,500.00	11,500.00	
UNIVERSITY PUBLICATION FUND:  Created by act of the Trustees November 6, 1922, from part of the bequest of the late Daniel B.  Fayerweather, the income of such fund, and if necessary any portion of the principal, to be expended under the direction of the President, to meet the cost of publishing the works of scholarship and research through the Columbia University Press. Established 1922	402.00	402.00	REF
VAN AM PRIZE FUND:  Gift of the Class of 1898 in commemoration of the twenty-fifth anniversary of its graduation and in memory of John Howard Van Amringe of the Class of 1866 to establish a fund, the income to be used in providing a bronze medal to be awarded each year to that member of the Sophomore Class who shall have most distinguished himself for service, character and courtesy in his relations to faculty, fellow students and visitors to the University. Established 1923	6,500.00	6,500.00	ORI OF I
VAN AMRINGE (PROFESSOR) MATHEMATICAL PRIZE FUND: Gift of George G. DeWitt, of the Class of 1867, to establish this fund, the annual income to constitute the Professor Van Amringe Mathematical Prize in Columbia College. Established 1910	5,100.00	5,100.00	нь і
VAN AMRINGE MEMORIAL FUND: Established by the transfer of the balance of gifts received for the Van Amringe Memorial, the income to be used for the upkeep and repair of the Van Amringe Memorial. Established 1927	500.00	500.00	KEAS
VAN BUREN (JOHN D., Jr.) MATHEMATICAL PRIZE FUND: Gift of Mrs. Louis T. Hoyt, to establish this fund in memory of her nephew John Dash Van Buren, Jr., of the Class of 1905. Established 1906.	5,500.00	5,500.00	UKEK
VANDERPOEL (FRANK) SCHOLARSHIP FUND:  Bequest of Frank Vanderpoel to found scholarships in the Schools of Applied Science. Established 1936.	25,000.00	25,000.00	
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At June 30, 1939	\$8,000.00	1,000.00	10,000.00	572.00	100,000.00	10,340.00
Additions 1938-1939				\$50.00		
At June 30, 1938	\$8,000.00	1,000.00	10,000.00	522.00	100,000.00	10,340.00
	VAN PRAAG (L. A.) FUND: Bequest of L. A. Van Praag to be used by the Trustees, at their discretion, for research into the causes and cure of cancer. Established 1915	VAN RENSSELAER (MARIANA GRISWOLD) PRIZE FUND: Gift of Maximilian Foster, the income to be awarded to the student who submits during the college year the best example of English lyric verse. Established 1926	VAN SINDEREN (HOWARD) SCHOLARSHIP FUND: Bequest of Mina Mason Van Sinderen, the income to be applied toward the education and support of needy and worthy students of the Law School, or any other purpose designated by the President with the approval of the Trustees. Established 1983	VAN VALKENBURGH (AGNES) MEMORIAL FUND: From a committee representing the faculty and alumni of the former Library School of the New York Public Library, the principal or income to be expended under the direction of the faculty of the School of Library Service. Established 1936.	WARING FUND:  The Chamber of Commerce of the State of New York, in the latter part of the year 1898, raised by public subscription the sum of \$100,000 to perpetuate the memory of the late George E. Waring. The income of the fund shall be devoted to the purpose of instruction in municipal affairs in such manner as the President and Board of Trustees of such College may direct	WATSON (MR. AND MRS. THOMAS J.) FUND: Gift of Mr. and Mrs. Thomas J. Watson, the income or principal to be expended in such ways as the President may direct. Established 1936

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5,200.00	800.00	643.80	6,000.00	12,000.00	5,100.00	
		10.00				
5,200.00	800.00	633.80	6,000.00	12,000.00	5,100.00	
WATSON (DR. WILLIAM PERRY) FOUNDATION IN PEDIATRICS: Gift of Dr. William Perry Watson, to establish a permanent fund, the annual income of which shall be given in cash to that member of the graduating class showing the most efficient work in the study of the Diseases of Infants and Children. Established 1921	WEINSTEIN (ALEXANDER) MEMORIAL FUND: Git of the classmates and friends of the late Alexander Weinstein, a member of the Class of 1921 College of Physicians and Surgeons, to establish this fund, the income from which is to be used in purchasing annually for the library of the Medical School additional copies of those reference books which are in greatest demand among the students. Established 1921	WENDELL MEDAL FUND: Git of the friends in the Alumni and Faculty of the late Professor George Vincent Wendell to honor and perpetuate his memory, the income to be applied to the cost of a medal to be awarded each year to a student in the graduating class of the Schools of Mines, Engineering and Chemistry who has been chosen by his class as best exemplifying the ideals of character, scholarship and service represented by Professor Wendell. Established 1924	WHEELER (H. A.) SCHOLARSHIP FUND: Gift of H. A. Wheeler of the Class of 1880, School of Mines, to establish a scholarship for students in mining, engineering or geology who need financial assistance to carry on their work in the undergraduate department of Columbia University. Established 1923	WHEELER (JOHN VISSCHER) SCHOLARSHIP FUND: Bequest of the late Susan E. Johnson Hudson to establish this fund, the income to provide a scholarship in the University. Established 1914	WHEELOCK (GEORGE G.) FUND: Gift of Mrs. George G. Wheelock, and William H. Wheelock, to establish this fund in memory of the late Dr. George G. Wheelock, the income to be used to meet the needs of the Department of Physiology. Established 1907	

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	At June 30, 1938	Additions 1938–1939	At June 30, 1939	
IGGIN (ALBERT H.) FUND: Gift of Albert H. Wiggin, the income or principal to be expended under the direction of the President for publication through the Columbia University Press. Established 1936	\$15,000.00	\$15,000.00 (Domondo)		
WILSON (EDMUND B.) FUND FOR THE ADVANCEMENT OF BIOLOGICAL RESEARCH:  Bequest of the late Frederic Kammerer, the income to be expended solely for aid to biological research under the direction of the Department of Zoology. Established 1933	10,000.00	(See Too)	\$10,000.00	
WOLFFRAM (CHARLES BERTHOLD) FUND:  Bequest of Amalie Wolfram, in memory of her husband, Charles Berthold Wolfram, the income to purchase literary works published and printed in the German language. Established 1931	5,000.00		5,000.00	
OODBERRY PRIZE FUND: Gift of the Woodberry Society, the income to provide a biennial prize to an undergraduate of Columbia for an original poem. Established 1935	1,600.00		1,600.00	
WRIGHT (HENRY) MEMORIAL LIBRARY FUND: Gift of the Housing Study Guild, the income to be used for the purchase of additions to the Henry Wright Memorial Library. Established 1938		758.45	758.45	
IRE INSURANCE FUND:  For the purpose of meeting the cost of repairing damage due to fire in those academic buildings which are not specifically insured.	50,000.00		50,000.00	
	\$39,601,200.56	\$721,420.16	\$40,322,620.72	

#### PERMANENT FUNDS

ESTABLISHED BY GIFT FOR PURCHASE OF LAND AND ERECTION AND EQUIPMENT OF BUILDINGS

	At June 30, 1938	Additions 1938-1939	At June 30, 1939
	1948	1938-1939	1939
Apparatus: Optical	\$7,110.00		\$7,110.00
Autobiography: John Stuart Mill	100.00		100.00
Avery Architectural Building	341,079.68	1	341,079.68
Baker Field	732,483.30		732,483.30
Bard Hall	1,764,373.50		1,764,373.50
Boat House: Baker Field	58,334.23		58,334.23
Boat House: Class of 1897	8,000.00		8,000.00
Casa Italiana	315,000.00		315,000.00
Castings: Duriron	75.00		75.00
Chapel Furnishing	3,382.00		3,382.00
Chemical Laboratories	30,000.00		30,000.00
Clock: Class of 1906	1,159.64		1,159.64
Crocker Research Laboratory: X-Ray	2,200.01		_,
Equipment	18,465.53		18,465.53
Da Costa Laboratory	20,000.00		20,000.00
Deutsches Haus	30,000.00		30,000.00
Earl Hall: Building.	164,950.82		164,950.82
Earl Hall Close	5,075.00		5,075.00
East Field.	420,000.00		420,000.00
Egleston (Professor): Setting of Bust	390.00		390.00
Engineering Apparatus	450.00		450.00
Engineering Building	333,486.84		333,486.84
Exedra: Granite.	5,000.00		5,000.00
Faculty House: Building	306,965.37		306,965.37
Faculty House: Equipment.	28,047.48		28,047.48
Faverweather Hall: Building	330,894.03		330,894.03
Filter: Rotary	1,000.00		1,000.00
Flagstaff: Class of 1881	4,600.00		4,600.00
Fountain of Pan	12,013.50		12,013.50
Furnace: Hegeler.	2,000.00		2,000.00
Furnald Hall: Building.	350,000.00		350,000.00
Gates: Class of 1882	1,500.00		1,500.00
Gates: Class of 1888.	2,000.00		2,000.00
Gates: Class of 1891	15,000.00		15,000.00
Goldsmith Library	850.00		850.00
Hamilton Hall: Building	507,059.16		507,059.16
Hamilton Hall: Clock.	1,913.90		1,913.90
Hamilton Hall: Gates.	2,020.00		2,020.00
Hamilton Hall: Gemot	1,000.00		1,000.00
Hamilton Hall: Class of 1909 Shield	20.00		20.00
Hamilton Statue.	11,000.00		11,000.00
"Hammerman" Statue	5,000.00		5,000.00
Hartley Hall: Building	350,000.00		350,000.00
Hartley Hall: Stained Glass Windows	2,000.00		2,000.00
Havemeyer Hall: Building	567,321.73		567,321.73
	999,749.98		999,749.98
Havemeyer Hall: Annex	600.00		600.00
	30,000.00		30,000.00
Highland, N. Y.: Property	2,052.00		2,052.00
Huntington Portrait	1,035.00		1,035.00
mummaning University Grounds	1,000.00	1	1,055.00

	At June 30,	Additions	At June 30,
	1938	1938–1939	1939
Instruments: Optical	\$9,930.00		\$9,930.00
Irvington-on-Hudson, N. Y.: Property	1.00		1.00
John Jay Hall: Building	1,662,295.39		1,662,295.39
John Jay Hall: Equipment	6,000.00		6,000.00
Johnson Hall: Building	1,235,846.93		1,235,846.93
Kent Hall: Building	588,704.91		588,704.91
Library: Building	1,100,639.32		1,100,639.32
Library Building: Alterations	15,800.70		15,800.70
Library: Equipment	2,570.00		2,570.00
Library: Marble Columns	1,678.00		1,678.00
Library: Torcheres	6,000.00		6,000.00
Livingston Hall: Building	333,707.50		333,707.50
Livingston Hall: Memorial Window	1,124.00		1,124.00
Maison Francaise: Building	33,300.00		33,300.00
Medical School (New): Building	4,084,044.02	\$4,000.00	4,088,044.02
Medical School (New): Equipment	18,569.72		18,569.72
Medical School (New): Residence Hall Site	508,692.43		508,692.43
Medical School (New): Site	855,001.00		855,001.00
Medical School (Old): Additions	117,842.07		117,842.07
Medical School (Old): Building	71,551.05		71,551.05
Medical School:Removing and Rebuilding	53,000.00		53,000.00
Medical and Surgical Equipment	14,912.80		14,912.80
Mineral Specimens: Dufourcq Collection	300.00		300.00
Model: Buildings and Grounds	19,972.70		19,972.70
Model: Braden Copper Co	1,700.00		1,700.00
Model: Coal Mine	250.00		250.00
Morningside Heights Site	331,150.00		331,150.00
Nichols Laboratories	30,000.00		30,000.00
Pathological Laboratory	19,136.94		19,136.94
Philosophy: Building	350,000.00		350,000.00
Physics: Building	1,550,859.70		1,550,859.70
Power House: Equipment	153,250.00		153,250.00
Precision Laboratory	8,000.00		8,000.00
President's House Furnishing Publications: Cragin Collection	14,410.17		14,410.17
St. Paul's Chapel: Bell	1,400.00 5,120.84		1,400.00 5,120.84
St. Paul's Chapel: Building	250,000.00		250,000.00
St. Paul's Chapel: Furniture	3,221.62		3,221.62
St. Paul's Chapel: Memorial Windows	32,700.00		32,700.00
St. Paul's Chapel: Organ and Case	27,000.00		27,000.00
St. Paul's Chapel: Tablet	21,000.00	880.00	880.00
St. Paul's Chapel: Torcheres	5,280.00		5,280.00
Schermerhorn Hall: Building	544,552.44		544,552.44
Schermerhorn Hall: Extension	1,198,090.84		1,198,090.84
School of Business: Building	995,009.01		995,009.01
School of Dental and Oral Surgery (Old)	471,185.32		471,185.32
School of Dental and Oral Surgery (New)	311,973.44		311,973.44
School of Dentistry: Building	33,500.00		33,500.00
School of Dentistry: Equipment	5,584.92		5,584.92
School of Journalism: Building	563,501.21		563,501.21
School of Mines: Building	334,855.32		334,855.32
School of Mines: Torcheres	1,000.00		1,000.00
Ski Jump at Camp Columbia	400.00		400.00
Sloane Hospital for Women: Additions			
and Alterations	399,263.14	1	399,263.14

	At June 30, 1938	Additions 1938-1939	At June 30, 1939
Smith (Munroe) Tablet	\$1,840.00		\$1,840.00
South Court Fountains	4,932.88		4,932.88
South Field	54,707.00		54,707.00
South Field Grading	11,500.00		11,500.00
South Hall	3,594,755.04		3,594,755.04
Statue of Letters and pylon	8,598.72		8,598.72
Statue of Science and pylon	13,148.95		13,148.95
Sun Dial—116th Street	10,000.00		10,000.00
Telescope	5,497.35		5,497.35
Trophy Room: Equipment	980.00		980.00
University Hall: Enlargement	764,385.76		764,385.76
Van Amringe Memorial	20,238.34		20,238.34
Vanderbilt Clinic: Building	350,000.00		350,000.00
Villard (Henry) Legacy	50,000.00		50,000.00
	\$31,069,020.18	\$4,880.00	\$31,073,900.18

# GIFTS AND BEQUESTS Received for the Purchase of Land and Erection and Equipment of Buildings

See Permanent Funds pages 183-185

(For list of gifts other than money see separate pamphlon $Name$	et) Date	Amount
Adams (Edward D.)Precision Laboratory: Physics		22.100.0100
Building	1913	\$8,000.00
Street	1910	30,000.00
Aldrich (Mrs. Richard)Medical School(old) Additions. Alexander (Chas. W.)Clinton window, St. Paul's	1917	5.00
Chapel	1906	300.00
College	1906	997.50
College	1908	10,000.00
College	1900-13	100,756.41
(new)	1921-27	28,540.29
\$28,540.29		
Anderson (Mrs. E. M.)	1917 1910	5,000.00 14,410.17
\$14,410.17		
Anonymous	1931-32	56,834.23
meyer Hall	1915	30,000.00
Anonymous	1909	1,000.00
AnonymousLivingston Hall Equipment	1937	100.00
Anonymous	1929	150,007.65
AnonymousMedical School (old) Additions. AnonymousMedical School (removing and	1917-19	10,691.58
rebuilding)	1915	15,000.00
ment	1919-21	4,712.80
Anonymous	1906-08	19,972.70
Anonymous. Furniture, St. Paul's Chapel Anonymous. School of Dental & Oral Surgery	1908	2,846.62
(new)	1926-27	75,891.20

\$75,891.20

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Name Purpose	Date	Amount
AnonymousSouth Field Grading		\$1,500.00
AnonymousSouth Hall Equipment		111.62
Anonymous Trophy Room Equipment		980 00
Association of the Alumni of Col-		
umbia CollegeSki Jump at Camp Columbia	1935	400.00
Aub (Miss Alma C.)Medical and Surgical Equipme		200.00
Avery (Samuel P.)Avery Library Building		339,250.00
Babcock (Samuel D.) Morningside Heights Site		5,000.00
Babcock & WilcoxSteam Boilers—Power House.		3,250.00
Baker (George F., Jr.) Medical School (old) Addition		2,500 00
Baker (George F.)Baker Field		730,583.15
Total amount of		,
gifts\$771,940.	59	
Taxes 41.357.		
	_	
\$730,583.	15	
	=	
Baldwin (Helen, M. D.)Medical School (old) Additions	s. 1917	100.00
Bausch & Lomb Optical CoOptical Instruments	1920-24	9,100.00
Beck (Chas. Bathgate) Bequest. Kent Hall Building	1899-1912	385,672.57
Total Bequest\$382,808.5	37	
Interest on bequest 10,373.2	20	
	_	
\$393,181.	57	
Less legal expenses 7,509.0	00	
\$385,672.	57	
	-	
Beekman (Gerard)Beekman window: St. Paul		
Chapel		600.00
Beekman (Gerard)Minturn window: St. Paul		
Chapel		600.00
Benson (Mary)		25.00
Bernheim (A. C.) Morningside Heights Site		1,000.00
Bernheim (Mrs. Geo. B.)Medical School (old) Additions		1,000.00
Blossom (Francis)		1,000.00
		10.000.05
Laboratory  Bondy Fund IncomeX-Ray Equipment: New Med		10,677.85
cal School		13,427.90
Brackenridge (Geo. W.)Medical School (old) Additions		50,000.00
Braden Copper CoModels of copper mines		1,700.00
Bruce (Catherine Wolfe) Telescope for New Observatory		5,497.35
Gift of \$10,000 received 1899		0,431.00
The gift with interest wa		
partly used in expenses; th		
balance remaining was use		
in part payment of the cos		
of a telescope in the Physic		
Building crected in 1925-20		
Building ReconstructionSchool of Business Building		255.69
Burgess (Annie P.) Estate of Havemeyer Hall Construction.		6,525.00
Burgess (Annie P.) Estate ofSchool of Business Building		64,188.71
Bequest \$63.396.2		,
Interest 792.4		
	-	
604 100 5	1	

\$64,188.71

Name Purpose  Carnegie Corporation Medical School (new) Building Carter (Henry C.) Morningside Heights Site  Cheesman (Dr. T. M.) Cheesman window: St. Paul's	1892	Amount \$1,100,000.00 150.00
Charge (Dr. T. M.) Estata	1905	600.00
Cheesman (Dr. T. M.) Estate of	) - -	11,162.81
oratory FundTesting Machine: Engineering Building	1935 3	22,999.65
Clark (Alfred C.)Morningside Heights Site	1893	10,000.00
Clark (Edward Severin)Fountain of Pan: the Grove Clark (J.William)School of Dental and Oral Sur	1908-09	12,013.50
gery (new)	1927 ) !	10,511.11
Class of 1874	1912-13	1,678.00
Class of 1880 Gates: Hamilton Hall		2,020.00
Class of 1881, Arts and MinesGemot: Hamilton Hall Class of 1881		1,000.00 4,600.00
Political Science	1926	2,500.00
Class of 1882120th Street Gates	1897-98	1,500.00
Class of 1882, ScienceTorcheres: School of Mines Class of 1883, Arts, Mines, and	1907	1,000.00
Political Science		5,280.00
ton	1913	390.00
Class of 1884, Arts and MinesClock: Hamilton Hall	1907	1,913.90
Class of 1884, ScienceGrading South Field Class of 1885, CollegeStained glass window "Soph		5,000.00
ocles," Hartley Hall	1885	1,000.00
Class of 1885, CollegeSun Dial: South Field		10,000.00
Class of 1886		5,000.00
119th Street  Class of 1889		2,000.00
Chapel		1,200.00
man"; the Quadrangle Class of 1890 Statue of Letters and pylon: S E. Cor. Broadway and 116tl	. 1914	5,000.00
Street	1913-16	8,598.72
(Hartley Hall)		1,000.00

REPORT OF THE TREASU	K E K	100
Name Purpose	Date	Amount
Class of 1891	Date	21111011111
gineering Buildings	1916	\$15,000.00
Class of 1891 Earl Hall Close	1932	4,075.00
Class of 1893	1918	5,120.84
Class of 1896, Arts and MinesPanels: John Jay Hall	1926	2,500.00
Class of 1897 Boat-house: Baker Field	1922-23	8,000.00
Class of 1897, Arts and Mines. Prentice Eight-oared shell	1927	1,500.00
Class of 1899	1909	5,000.00
Class of 1900 Statue of Science and pylon: N.	1000	0,000.00
E. Cor. Broadway and 116th		
Street	1925	13,148.95
Class of 1906	1916	1,159.64
Class of 1909 Shield: Hamilton Hall	1912	20.00
Class of 1915, College and	10.1	20.00
Science		
Hall	1927	1,000.00
Clinton (De Witt)		2,000.00
Chapel	1906	300.00
Cochran (Alexander Smith)Kent Hall Building	1909	100,000.00
College of Dental and Oral Sur-		,
gery		
and Oral Surgery	1924	656.00
College of Dental and Oral Sur-		
gery		
gery	1924	462,529.32
Value of Buildings		,,,,,,,,
and Grounds\$444,529.59		
Cash		
\$462,529.32		
<del></del>		
College of Physicians and Sur-		
geonsMedical School (old) Building.	1903	71,551.05
Columbia University Athletic		
Association Boat-house at Highland, N. Y	1921	30,000.00
.Converse (E. C.) Medical School (old) Additions .	1919	1,000.00
Cragin (E. B.)	1919	1,400.00
Crocker Fund IncomeX-Ray Equipment: Crocker Lab-		
oratory	1921	7,787.68
Crocker Fund IncomeX-Ray Equipment: New Medica		
School	1935	5,141.82
Cutting (R. Fulton)Morningside Heights Site	1893	10,000 00
Common wealth FundLaboratory Building: New Med-		
ical School	1936-37	290,000.00
Da Costa (Charles M.)Laboratory, Schermerhorn Hall.	1890	20,000.00
Davies (Julien T.)		
Chapel	1913	1,000.00
Davies (Julien T.)Benson Window: St. Paul's		
Chapel	1906	600.00
De Lamar Fund, Income of Medical School (old) Additions.		3,600.00
De Peyster (Mrs. Frederic J.) De Peyster Window: St. Paul's	1920	
		200.00
Chapel	1920	600.00
Chapel  DeWitt (George G.)Barnard Window: St. Paul's	1905	
Chapel  DeWitt (George G.)Barnard Window: St. Paul's Chapel	1905 1905	500.00
Chapel  DeWitt (George G.)Barnard Window: St. Paul's	1905	

Name         Purpose           Dodge (Marcellus Hartley)         South Court Fountains           Dodge (William E.)         Earl Hall           Gift         \$159,540.38           Interest         5,410.44	Date 1906-08 1900-02	Amount \$4,932.88 164,950.82
\$164,950.82	1926	55,745.1 <b>5</b>
\$55,745.15 		
Dryden (Forest F.) Medical School (old) Additions.  DuPont (Mrs. Coieman) Property at Irvington-on-Hud-	1918	1,000.00
son, N. Y  Duriron Castings Co Castings for the Department of	1935	1.00
Chemical Engineering	1920	75.00
Eddy (Jesse L.) Medical School (old) Additions.	1918	500.00
Epsilon Psi Epsilon Optical Instruments Fayerweather (Daniel B.) Be-	1927	1,800.00
quest	1891-1917	330,894.03
\$330,894.03		
Files	1906	600.00
Fish (Stuyvesant)	1914	2,000.00
France-America Committee Maison Francaise Equipment	1923	2,589.64
\$2,589.64		
Fuller (Paul, Jr.)	1913	100.00
acy	1912-14 1925-28	350,000.00 1,299,732.57
\$1,299,732.57		
General Optical CoOptical Instruments Globe Optical CoOptical Instruments	1920 <b>-2</b> 7 1920	2,020.00 250.00
Goldsmith (Byron B.) Estate of Goldsmith Library	1927	850 00
Gould (George J.)Toward Purchase of East Field.	1909	100,000.00
Griscom (Acton)	1924	30.00
Medical School	1937	180,000.00
Hamilton Manufacturing CoOptical Instruments	1927	560.00
Hand (Mrs. Learned)Medical School (old) Additions.	1917	50.00
Harkness (Edward S.) New Medical School Site Gift, 1923, assessed valuation \$1,180,000.0	1923	855,001.00
eu valuation		

Name	Purpose Less Value of land transferred as follows: Neurological Institute \$120,000.00 New York State Psychiatric Hospital 74,999.00	Date	Amount
	Presbyterian Hospital 130,000.00		
	\$324,999.00 —————		
	\$855,001.00 =======		
Harkness (Edward S.)  Harkness (Edward S.)  Harkness (Edward S.)  Harkness (Edward S.)  Harkness (Mrs. H. S.)  Harper (J. W.) Legacy  Harris (Ellen C.) Bequest	cal School	1929-31 1930-33 1933 1932 1919 1901 1922-37	\$508,692.43 1,764,373.50 3,594,643.42 150,000.00 10,000.00 5,000.00 662,582.10
Havemeyer (Henry O.) and others	Havemeyer Hall Building Gift of property valued at\$450,000.00 Less loss on sale 35,793.35	1896	414,206.65
Hawes (A. J.)		1919	100.00
Hepburn (A. Barton) Estate of Hewitt (Hon. Abram S.) Hine (F. L.) Hoffman (Charles Frederick)	117th Street	1913 1923-32 1893-96 1918	30,000.00 218,620.43 4,000.00 1,000.00
	Bequest \$5,000.00		

Name	Purpose Interest \$581.40	Date	Amount
	\$5,581.40		
	. Medical School (old) Additions School of Business Building Gift	1919 1919	\$1,000.00 3,255.00
	\$3,255.00 ———		
James (Arthur Curtis)	. Tablet: St. Paul's Chapel	1939 1918 1892-94 1919	880.00 1,000.00 50,000.00 500.00 105,000.00
	\$105,000.00		
Jenkins (Mrs. Helen Hartley). Jenkins (Mrs. Helen Hartley). Jessup (Morris K.). Jones (James Elwood). Jusserand (J. J.). Kane (Annie C.) Estate of Kane (Annie C.) Estate of Kane (Annie C.) Estate of Keene (Charles S.) Estate of.	Medical School (old) Additions. Hartley Hall Building. Philosophy Building Morningside Heights Site. Model of Coal Mine. Maison Francaise Equipment. Havemeyer Hall Annex Havemeyer Hall Building. University Hall Engineering Building. Hamilton Hall Building Gifts. \$500,000.00 Interest. 6,061,66	1917 1904-05 1910-11 1893 1923 1913 1927 1927 1927 1933 1905-06	500.00 175,000.00 350,000.00 5,000.00 250.00 200.00 337,167.88 54,590.08 108,242.04 232,687.19 506,061.66
	\$506,061.66		
	. Morningside Heights Site	1892	1,000.00
King (Willard V)	rebuilding)	1915-16	2,000.00
	(new)	1927	2,000.00
	.Kingsland Window: St. Paul's Chapel	1906	300.00
	.Kingsland Window: St. Paul's Chapel	1906	300.00
Ladenberg (Mrs. Emily)	. Medical School (removing and re- building)	1915	1,000.00
	. Medical School (old) Additions. . School of Dental & Oral Surgery	1917	10.00
Langeloth (Jacob) Estate of	(new)	1929 1915	56.80 5,062.50
	\$5,062.50		
Lawrence (Mrs. Benj. B.)	Barnard and Lawrence Windows: St. Paul's Chapel	1923	18,400.00

REI ORI	or run r	IL II A D U	10 15 10	100
Name	Purpose Transferred to Chapel Furnishing		Date	Amount
	Fund	\$1,600.00		
	:	\$18,400.00		
Lawrence (Mrs. Benj. B.)	St. Paul's Chapel Fu Balance of gift for	rnishing	1923	\$3,727.00
	Memorial Windows Interest \$2,456.53	s \$1,600.00		
	Less trans-			
	fer to			
	Chapel Furnishing			
	Fund 329.53			
		2,127.00		
	:	\$3,727.00		
Lee (Mrs. Frederic S.)	School of Dental & O	ral Surgery		
	(new)		1927	5,366.11
	Gift			
	•	\$5,366.11		
	;			
Lewisohn (Adolph)	School of Mines Buil	ding	1919 1904-05	450.00 250,000.00
John Henry and Goodhue)	Hall		1909	1,124.00
Low (A. A.)			1892-94	15,000.00
Low (Seth)			1892	5,000.00
Low (Seth)			1896-99	1,100,639.32
Low (Seth) Bequest			1938	15,800.70
McClelland (John)	ical School		1891	19,136.94
McLean (James)			1918	1,000.00
Mackay (Clarence H.)			1914	1,000.00
Mackay (Clarence H.)			1918	12,000.00
Macy (Mrs. and Mr. V. Everit).	Medical School (old)	Additions.	1917-19	6,000.00
Marling (A. E.)			1919 1917-18	1,000.00 568,069.02
The state of the s	Gift of 2,040 Share		1011 10	000,000.02
	mon Stock of the			
	Light & Traction	n Co., the		
	proceeds of which			
	with interest and amounted to \$568.	,069.02.		
Mead (Grace Hartley)			1000	11 000 00
Mehler (Miss Elsa)	ical School (old)		1938 1917	11,000.00 10.00
Moore (William H.)			1918	1,000.00
Morgan (J. Pierpont)			1892-95	100,000.00
Morgan (William Fellowes)				
	Grounds		1913	1,035.00

Name Purpose	Date	Amount
Morgan (William Fellowes) School of Dental & Oral Surgery		
(new)	1927	\$2,622.92
Gift\$2,500.00		
Interest 122.92		
\$2,622.92		
Mosher (Eliza M.)	1917	500.00
Mower (Sara E.) Estate ofSchool of Business Building	1920-21	110,226.04
Bequest \$91,101.43	1020 21	110,550.01
Less Expenses 2,220.34		
Hess Empenses		
\$88,881.09		
Interest 21,344.95		
\$110,226.04		
<del></del>		
Munsey (Frank A.)	1910	50,000.00
Nash (William A.)	1918	250.00
	1923	
New Jersey Zinc Co Hegeler Furnace	1923	2,000.00
New York Odontological Society. Anatomical Collections and	1000	9 000 00
Specimens	1926	8,000.00
Nichols (William H.)Laboratories: Havemeyer Hall.	1912	30,000.00
Notman (George) Medical School (old) Additions.	1917	100.00
Notman (Mrs. George)Medical School (old) Additions.	1917	100.00
Ogden (David B.)Ogden Window: St. Paul's		
Chapel	1906	600.00
Oliver Continuous Filter CoRotary Filter	1919	1,000.00
Optometrical Club of Brooklyn. Optical Instruments	1927	1,500.00
Optometrical Society of the City		
of New YorkOptical Instruments	1927	1,750.00
Osborne (Mr. and Mrs. Wm.		
Church)Medical School (old) Additions	1918	1,000.00
Ottindorfer (Oswald)Morningside Heights Site	1892	5,000.00
Palmer (Edgar) Medical School (old) Additions.	1919	3,000.00
Parish (Henry)Morningside Heights Site	1893	5,000.00
Parsons (Mrs. Elsie Clews) Medical School (old) Additions .	1918	100.00
Parsons (Mrs. Edgerton) Medical School (old) Additions.	1917	5.00
Parsons (General William Bar-		
clay)Portrait	1928	2,570.00
Peabody (George Foster and		
Charles)Organ and Case: St. Paul's		
Chapel	1905-06	27,000.00
Pell (Howland) and othersPell Window: St. Paul's Chapel.	1906	600.00
Pendleton (Francis K.)Pendleton Window: St. Paul's		
Chapel	1906	600.00
Philosophy, Department of		
(Members)Autobiography of John Stuart		
Mill	1923	100.00
Phoenix Legacy: IncomeObservatory and Telescope: Phy-		
sics Building	1928	35,748.90
Equipment of Schermerhorn Hall	1930	39,960.84
Engineering Building	1932	5,000.00
School of Mines	1932	9,588.18
Testing Machine: Engineering		
Building	1935	5,000.00
Pratt (Mrs. Chas. M.)Medical School (old) Additions.	1917	500.00
1100 (1110, 0110, 111),		2.5.00

Name Purpose Pulitzer (Joseph)	Date 1903-04	Amount \$563,501.21
Randolph (Wm. Fitz) Estate of . Havemeyer Hall Building	1933	92,000.00
Rathbone (Charles H.) Medical School (new) Building .	1938	4,000.00
Reid (D. G.)	1918	1,000.00
Chapel	1906	600.00
Rebuilding)	1916	10,000 00
Rebuilding)	1918	25,000.00
(new)	1925	25.00
Rockefeller Foundation         Medical School (new) Building           Gift         \$1,008,333.33           Interest         43,495.47	1925-28	1,051,828.80
\$1,051,828.80		
Sands (B. Aymar)Barnard Window: St. Paul's		
Chapel	1914	500.00
Sands (Sarah A.) Estate of Sands Window: St. Paul's Chapel	1906	600.00
Schermerhorn (F. Augustus)Barnard Window: St. Paul's Chapel	1913	1,000.00
Schermerhorn (F. Augustus) Estate of	1922-23	306,965.37
Schermerhorn (F. Augustus) Estate of	1922-23	27,552.48
Bequest\$304,442.77 Interest30,075.08		_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
\$334,517.85		
Building\$306,965.37 Equipment 27,552.48		
\$334,517.85		
Schermerhorn (F. Augustus) Estate of	1929-32	1,244,549.26
(changes)86,419.26		
\$1,244,549.26		
Schermerhorn (F. Augustus) Es-		
tate of Livingston Hall Bequest \$262,993.25	1926	275,000.00

Name	Purpose		Date	Amount
	Interest	\$12,006.75		
	\$ =	275,000.00		
Schermerhorn (William C.) Schiff (Jacob H.) School of Dentistry Endo	Morningside Heights		1896-99 1892	\$458,133.18 5,000.00
ment Fund (Income) School of Dentistry Endowme	. School of Dentistry I	Building	1919-21	26,000.00
Fund (Income)	School of Dentistry E		1921	5,584.92
Scribner (Mrs. Arthur) Seligman (Isaac N.) Estate of			1917 1920	25.00 3,384.00
Deliginali (Isaac 11.) Estate of	Bequest			-,
	Van Am- ringe			
	Mem-			
	orial. \$1,554.32			
	Avery			
	Lib-			
	rary 1,829.68	3,384.00		
	_			
	Balance (Gift Acct.)	\$2,080.17		
Shepard (F. J.)	Medical School (old)	Additions.	1919	500.00
Sloan (Samuel)			1892	5,000.00
Sloan (Samuel)			1907	6,000.00
Sloane (Mr. and Mrs. Wm.D.)	terations and addit	omen (Al-	1912	399,263.14
Smith (Lenox) Estate of			1927	57,800.00
	Bequest			
	Interest, etc	2,450.32		
	-	\$57,800.00		
	=			
Smith (Lenox) Estate of			1937	20,104.99
Smith (Mrs. Munroe)			1927	1,840.00
Sorchan (Mrs.Victor)	fessor Munroe Smi		1927	1,000.00
Standard Optical Co			1920	60.00
Stephens (Mrs. W. B. a				
Daughter)				
Grand (TELL)	collection)		1921 1905	300.00 10,000.00
Stetson (Francis Lynde) Stewart (Lispenard)	Kent Hall Building	St Paul's	1905	10,000.00
	Chapel		1906	600.00
Stewart (Wm. Rhinelander)	Rhinelander Window	: St. Paul's		
	Chapel		1906	600.00
Stokes (Olivia Egleston Phelps Stokes (Olivia Egleston Phe	lps		1910	20,000.00
and Caroline Phelps)	St. Paul's Chapel Cor	struction.	1904-06	250,000.00
Straight (Mrs. Willard D.) Straus (Oscar S.)	Barnard Window:	St. Paul's	1917	1,000.00
	Chapel		1906	500.00
Sulzberger (Dr. Nathan)	meyer Hall		1918	600.00
Sutro (Mrs. Lionel)			1917	50.00

Thompson (Charles G.) Estate of Livingston Hall Building Thompson (Charles G.) Estate of School of Mines Building		
Thompson (Charles G.) Estate of University Hall		,
of Johnson Hall Building Thompson (Elizabeth G.) Estate	1935-36	683,222.90
of	1936-37	42,721.72
ofUniversity Hall		177,944.05
Thompson (Mary Clark) Medical School (old) Addit		
Thompson (Mary G.) Estate of Johnson Hall Building		·
Thompson (Mary G.) Estate of. Physics Building		, ,
Thompson (Mary G.) Estate ofUniversity Hall Van Amringe Memorial Com-		,
mitteeVan Amringe Memorial Van Sinderen (Mina Mason) Es-		
tate of Engineering Building Van Cortlandt (Robt B.) Van Cortlandt Window:	St.	•
Paul's Chapel Vanderbilt (Cornelius, William	1906	600.00
K., Frederick W. and George		
W.)		
Equipment		
Vanderbilt ClinicSchool of Dentistry Buildi		,
Vanderbilt (Cornelius) Morningside Heights Site		100,000.00
Various Donors		250,000.00
Various Donors		315,000.00 1,900.15
Various Donors		2,052.00
Various Donors		4,881.49
Various Donors School of Dental and Oral St	ur-	
Various Donors South Field		26,000.00 54,707.00
Various DonorsMedical School Equipment		1,475.00
Various (Interest on Gifts)Medical School (old) Additi		95.49
Villard (Henry) Estate of Morningside Heights Site		50,000.00
Wallace (J. M.) Medical School (old) Additi		1,000.00
Waterbury (Elizabeth)Medical School (old) Additi		1,000.00
Waterbury (John I.)		2,500.00
Watson (Thomas J.)		1,000.00
Webber (John) Estate ofSchool of Business Building Bequest \$1,00	1918	1,116.28
<del></del>		
\$1,11	<del></del>	
William (Blair S.)		214.86
	00.00	211.00
	4.86	
\$21	4.86	
		\$31 073 900 18

\$31,073,900.18

#### GIFTS AND BEQUESTS RECEIVED DURING 1938-39

OIL 10 IN DESCRIPTION TO THE CELLY	LD DOI	170	0-37
A. GIFTS TO CAPITAL:			
1. General Endowments:			
Class of 1929 College, for the Class of 1929 Ter	nth Anni-		
versary Fund		\$331.86	
Estate of Mary B. Pell, for the Pell (Mary B.) Fr		173,574.90	
Estate of Charles H. Rathbone		4,000.00	\$177,906.76
2. Special Endowments:	_		
Alumni Fund Committee, for the following purp			
Alumni War Bonus Fund, representing the pr			
World War Adjusted Certificates of the follo			
Bacon (Rogers H.)	\$789.68		
Demorest (William J.)	723.00		
Goodrich (Dr. Charles Howard)	435.00		
Goodwin (Walter C.)	99.70		
Raymond (Carrington)	50.00	\$2,097.38	
	50.00	\$4,091.30	
Alumni Fund Committee, from the following	, for the		
purposes specified:			
Class of 1897 College and Engineering,			
for the Class of 1897 Arts, Mines and	200.00		
and Architects Endowment Fund Class of 1899 P. & S., for the Class of	\$90.00		
	605.00		
1899 P. & S. Scholarship Fund	605.00		
Class of 1904 College and Engineering, for the Class of 1904 Scholarship Fund	1 500 00		
Class of 1907 College and Engineering,	1,500.00		
for the Class of 1907 Scholarship Fund	995 00		
Class of 1912 P. & S., for the Class of	225.00		
1912 P. & S. Scholarship Fund	115.00		
Class of 1914, for the Class of 1914 Twen-	115.00		
ty-fifth Anniversary Fund	8,900.00		
Class of 1916 Law, for the Class of 1916	0,500.00		
Law Scholarship Fund	40.00		
Class of 1917 College and Journalism, for	40.00		
the Class of 1917 College and Journalism			
Dormitory Room Endowment Fund	10.00		
Class of 1921 College, for the Class of 1921	-0.00		
College Scholarship Fund	35.00		
Class of 1921 Engineering, for the Wendell			
Medal Fund	10.00		
Class of 1922 College, for the Class of 1922			
Scholarship Fund	68.50		
Class of 1924 College, for the Class of 1924			
College Dormitory Room Endowment			
Fund	75.00		
Class of 1926 College, for the Class of 1926			
College Dormitory Room Endowment			
Fund	5.00		
Class of 1928 P. & S. for the Class of 1928			
P. & S. Decennial Fund	44.00		
Class of 1932 College, for the Class of 1932			
College Dormitory Room Endowment			
Fund	10.00		
Class of 1935 Engineering, for the School of			
Engineering Loan Fund, Thomas H. Har-			
rington Scholarship	30.00		

Class of 1935 Law, for the Class of 1935 Law	
Scholarship Fund\$5.0	0
Estate of Robert M. Raymond, for the following purposes:	
Raymond (Robert M.) Fund,	
for Religious and Social Work\$6,839.27	
Raymond (Robert M.) Fund.	
for the University Medical Office	0
Office	2
Hewlett (Arthur T.), for the Columbiana	^
Endowment Fund	U
dowment Fund	0
Various, for the Business Alumni Scholar- ship Fund	0
Various, for the Ralph Waldo Gifford Mem-	U
orial Fund	0 \$34,725.20
Anonymous, for the Barker (Mary Perin) Fund Anonymous, for the Horn (James T.) Scholarship Fund	
Columbia College	. 2,500.00
Anonymous, for the Horn (James T.) Scholarship Fund	
School of Engineering	
Fund for Graduate Medical Instruction and Research	
Class of 1898, College, Engineering and Architecture, fo	
the Class of 1898, College, Engineering and Archi	
tecture Fund	
Estate of William Campbell, for the Campbell (William	
Fellowship Fund	. 171,456.60
Estate of Benjamin N. Cardozo, for the Cardozo (Ben	
jamin N.) Fund for a chair in Jurisprudence in the Lav School	
Estate of Charlotte Dibblee, for the Dibblee (Ezra Reed	
and Frances M.) Scholarship Fund	
Estate of James Loeb, for the Loeb (James) Fund Estate of Mary Purroy Mitchel, to establish the Mitche	
(John Purroy) Memorial Fund	
Estate of Thekla B. Porter, for the Porter (David B. and	d
Wife) Memorial Fund	
Estate of Virginia J. Ritchie, for the Ritchie (Peter C Jr.) Scholarship Fund	
Fitzpatrick (Daniel E.), for the Business Alumni Scholar	
ship Fund	. 50.00
Grant (Wheadon Martin), for the Class of 1913 Scholar	
ship Fund	
as Endowment Fund	
Housing Study Guild, to establish the Wright (Henry	
Memorial Library Fund	
Huber (Leo) for the Business Alumni Scholarship Fund. Jackson (Mrs. A. V. Williams), for the Jackson (A. V	
Williams) Fellowship Fund	. 500.00
Lehman (Hon. Irving), for the Cardozo (Benjamin N.	
Fund	
Library Fund	

Sutliff (Mary L.), to be added to the Van Valkenburgh		
(Agnes) Memorial Fund	\$50.00	
Todd (Mrs. Henry A.), for the Todd (Henry Alfred)	400.00	
Prize Fund	2,000.00	\$514,557.13
_		ψ <b>011</b> ,001.10
3. Buildings and Grounds:		
Commonwealth Fund, toward the cost of construction		
and equipment of the Laboratory Building at the Med-		
ical Center for graduate work in Medicine	\$40,000.00	
Estate of Mary E. Staff, for refurnishing women's rooms	Ψ10,000.00	
on the Campus	500.00	
Jackson (Mrs. A. V. Williams), for a tablet in memory of	000.00	
her husband, to be placed in Saint Paul's Chapel	880.00	41,380.00
		41,000.00
B. GIFTS TO INCOME:		
1. For General Purposes:		
Alumni Fund Committee	8,207.96	
Alumni Fund Committee from the following:	0,201.50	
King (Willard V.)		
Krumb (Henry)		
Lifshutz (Nathan)		
Sage (William H.)	1 000 04	
Sage (William II.)	1,839.84	
Beaumont (Commodore Louis D.)	0.000.00	
Watson (Mrs. Thomas J.)	9,000.00	04.047.90
watson (MIS. I nomas J.)	5,000.00	24,047.80
2. For Specific Purposes:		
Ahrens (Henry A.), toward the maintenance of the Deut-		
sches Haus	E 00	
Alumni Fund Committee, from the following, for the pur-	5.00	
poses specified:		
Anonymous, for furnishings in the Men's		
Anonymous, for electrophoresis appara- tus for the Medical Center 3,000.00		
tus for the Medical Center		
School of Engineering 500.00		
Class of 1899, College and Engineering,		
one-half for the College Dean's Fund and one-half for the Engineering Dean's		
Dohr (Prof. James L.), to be added to the income of the Business Alumni Scholar-		
ship Fund		
Jarcho (Julius), for the Medical School		
Library		
Jordan (Wm. Donald), for the H. Parker		
Willis Fellowship Fund		
Merriweather (Duncan) for the Account-		
ing Department Gift		
Rich (Wiley D.), for the Accounting De-		
partment Gift		
Seidman (Edward S.) toward a scholar-		
ship in the Law School		
Various, for specific purposes		
Warren (George E.), for Student Aid 200.00	F 000 F0	
Wiley (W. O.) for Columbiana 500.00	5,689.50	

American Cigarette & Cigar Company, for salaries in the

REPORT OF THE TREAS	URER
Department of Chemistry	\$2,400.00
partment of Biological Chemistry	1,920.00
purposes:	
Fellowships for graduate students in the	
University	
Fellowship for study of Chinese language	
and history at Yenching University 200.00 Assistance to and experimentation with	
cataloguing of the Chinese and Japa-	
nese collections in the Library 5,000.00	8,200.00
American Institute of Baking, for research in the Depart-	1 500 00
ment of Chemistry	1,500.00
Sciences	1,200.00
American Library Association, for the following purposes:	2,200.00
Toward a scholarship in the School of Li-	
brary Service	
Salaries in the School of Library Service 1,600.00	2,600.00
American Medical Association, for the following purposes:	
Therapeutic Research \$300.00	
Research in Public Health 500.00	800.00
American Philosophical Society, for the preparation of a punched card catalogue of the data concerning the	
stars on the Boss General Catalogue for the Depart-	
ment of Astronomy	1,200.00
Anonymous, for the Surgical Pathology Laboratory Spec-	,
cial Assistance Gift	1,000.00
Anonymous, for Insulin Research, Department of Prac-	1 440 00
tice of Medicine	1,440.00
partment of Chemical Engineering	325.00
Anonymous, for scholarships, Columbia College	500.00
Anonymous, for special research in the Department of	
Pathology	400.00
Anonymous, for Biochemical Research in the Department	050.00
of Biological Chemistry.	950.00 200.00
Anonymous, for a special purpose	200.00
partment of Anatomy	2,500.00
Anonymous, for special scholarship, Medical School	1,100.00
Anonymous, for Office Supplies and Sundries in the Ad-	
ministrative Budget of the College of Physicians and	
Surgeons	92.00
Anonymous, for research in the Department of Chemical	1,000.00
Engineering	3,500.00
Anonymous, for investigative and research work in the	0,000.00
Department of Dermatology	13,180.00
Anonymous, for the Institute of Cancer Research	300.00
Anonymous, for research in Food Chemistry	800.00
Anonymous, for scholarships in the College of Physicians	19 000 00
and Surgeons	12,000.00 50.00
Anonymous, for the Philosophy Departmental Account  Anonymous, for Advanced Humanistic Work	369.02

Anonymous, for Edwin R. A. Seligman Prize in Eco-	
nomics	\$200.00
Anonymous, for research work in the School of Business	7,000.00
Anonymous, for research in the Social Sciences	500.00
Anonymous, for salaries in the Department of Neurology.	2,500.00
Anonymous, for cancer research	20,000.00
Anonymous, to defray the cost of a planting on the Cam-	
pus, in memory of Mrs. Frederic S. Lee	85.00
Anonymous, for salaries in the Department of Obstetrics	##O OO
and Gynecology	750.00
Anonymous, for salaries in the Department of Physics Appleby (John S.), for the Ware Memorial Library in the	300.00
School of Architecture	1,000.00
Armstrong (Professor Edwin H.), for use of the Depart-	1 000 00
ment of Electrical Engineering	1,000.00
Association of Lacedaemonians, for the purchase of Mo- dern Greek books for the Library	85.00
Beaumont (Commodore Louis D.), for cancer research	1,000.00
Bishop (Ogden N.), for the Palmer Wright Memorial	1,000.00
Fund	50.00
Bodelsen (Oscar), for the Palmer Wright Memorial Fund.	2.00
Brain Research Foundation, for salaries in the Depart-	
ment of Neurology	5,000.00
Bush (Professor Wendell T.), for assistance and supplies,	
Department of Philosophy	575.95
Cabot (Dr. Godfrey L.), for the Maria Moors Cabot	
Prizes in Journalism	10,000.00
Cabot (John W.), for the Maria Moors Cabot Prizes in	
Journalism	1,000.00
Carnegie Corporation, for the following purposes:	
Study of young workers in a metropolitan	
area, under the direction of the Institute	
of Educational Research, Teachers Col-	
lege\$10,000.00	
Chemical Research in the field of Sex Hor-	
mones	
Work in Town Planning	
Research in the field of statistical analysis 1,550.00	
Research in Economics	
Research in Biological Chemistry 650.00	
Grants-in-aid for museum workers or art	
teachers in the New York region 1,437.50	
Study in Land Economics	
Preparation of a subject index for all references appearing in the Psychological In-	
dex from 1894 to 1927 500.00	
Research in Social Sciences 2,000.00	
Support of population studies, Department of Anthropology	
Work in reproducing the Diary of George Templeton Strong	38,887.50
Templeton Strong	22,201.00
Chemical Foundation, for the following purposes:	
Research in the field of solvents pertaining	
to the oil industry	
to the off industry \$2,100.00	
Biological Chemistry Research 400.00	
** ***********************************	3,300.00

Ciba Pharmaceutical Products, Inc., for research in the	
Department of Biological Chemistry	\$2,500.00
Circolo Italiano of Columbia College, for student aid in	
Columbia College	50.00
Class of 1908, for the rental of a room in the Residence	
Halls	180.00
Class of 1909, for the Class of 1909 Scholarship	400.00
Class of 1910, for the maintenance of the Class of 1910	
Scholarship	195.00
Class of 1913, for the Class of 1913 Scholarship	400.00
Class of 1915, for the rental of a room in the Residence	
Halls.	180.00
Columbia University Club, for the Columbia University	4 500 00
Club Scholarships	4,500.00
	9.050.00
mina Professorship	3,250.00
Study on the control of business in Med-	
ieval and Tudor England \$3,750.00	
Research in Legal History	
Administrative Boards and Commissions 7,500.00	16,250.00
Transmistrative Boards and Commissions 1,500.00	10,200.00
Covello (Leonard), for the Casa Italiana Educational	
Bureau Account	25.00
Crocchio Goliardico, for student aid for a course in Italian	75.00
Cushman (Mrs. Paul), for student aid, Columbia College.	1,200.00
Davis (Henry G.), for Camp Columbia	50.00
Davison (F. Trubee), for the F. Trubee Davison, Jr.	55.55
Gift for the Study of Leukemia, Lymphosarcoma and	
allied diseases	5,045.42
Difco Laboratories, Inc., for research in the De Lamar	,
Institute of Public Health	500.00
Donaldson (Mrs. John Willcox), for planting at Nevis	50.00
du Pont (E. I.) de Nemours & Company, for the du Pont	
Fellowship	750.00
Eggers (Dr. Carl), toward the maintenance of the Deut-	
sches Haus	50.00
Elliott (Edward S.), for the Palmer Wright Memorial	
Fund	5.00
Emeny (Mrs. Brooks), for research in the Department of	
Diseases of Children	2,000.00
Emergency Committee in Aid of Displaced German	
Scholars, for salaries in the Law School	2,000.00
Engelhard (Charles), toward the maintenance of the	
Deutsches Haus	100.00
Engineering Foundation, for Barodynamic Research	3,375.00
Epstean (Edward), for the Epstean Collection on Pho-	100.00
tography	180.00
Faber (Messrs. Eberhard and Lothar W.), toward the	****
maintenance of the Deutsches Haus.	100.00
Faculty Fellowship Fund, for the following purposes:	
Stipend for a Visiting Professor	2,300.00
Aid for a designated student	2,300.00
Farrell (Arthur), for the Palmer Wright Memorial Fund.	1.00
Fitzgibbon (Thomas O'G.), for the Palmer Wright Mem-	1.00
orial Fund	5.00
Florida Citrus Commission, for research on the nutri-	0.50
tional aspects of citrus fruits	5,000.00

French (Mrs. John), for Chapel Music, in memory of Mrs. Frederic S. Lee	\$100.00
Research at the Institute of Cancer Research	5,500.00
Fulton (Chester A.), for the Palmer Wright Memorial Fund	10.00
General Education Board, for Normal Child Develop- ment Study, Neurological Institute	32,000.00
Deutsches Haus	50.00
of the Deutsches Haus	600.00
Gertz (Max), for the Palmer Wright Memorial Fund Grade A Milk Association, Inc., for a study of the com- parison of Grade A and Grade B milks for infant feed-	2.50
ing, De Lamar Institute of Public Health	3,000.00
Grady (George), for the University Medical Office	100.00
Gristede (Diedrich), toward the maintenance of the Deutsches Haus	100.00
Halbach (E. K.), toward the maintenance of the Deutsches Haus	25.00
Hartley Corporation, for the Marcellus Hartley Laboratory	2,000.00
Heye (Carl T.), toward the maintenance of the Deutsches Haus.	10.00
Hinrichs (Hans), toward the maintenance of the Deutsches Haus	50.00
Hiss (Philip Hanson), for the Department of Bacter-	00.00
iology	2,300.00
cock Scholarship, School of Journalism	1,000.00
the Deutsches Haus	10.00
Department of Pharmacology Holz (Julius), toward the maintenance of the Deutsches	50.00
Haus	50.00
Hopkins (Henry Powell), for a medal in commemoration of Professor Frank Dempster Sherman	100.00
Hoyt (Mrs. John Sherman), for Normal Child Development Study	500.00
Haus	25 00
sches Haus.  Ilgner (Rudolf), toward the maintenance of the Deutsches	100.00
Haus	10.00
Institute of American Meat Packers, for Research in the Social Sciences.	1,000.00
Institute of French Studies, for a scholarship or fellow-	1,916.02
ship, Department of Romance Languages  Italian Interuniversity Bureau, for the operation of the	1,010.02
Bureau	700.00
Italian Interuniversity Bureau—Casa Italiana	1,263.00
Italy America Society, for the Eleonora Duse Fellowship.	657.00

Jaeger (Gustave A.), for the Palmer Wright Memorial	
Fund	\$3.00
Jarcho (J.), for special research in the Department of Pathology	100.00
Johnson (John H.), for the Palmer Wright Memorial	5.00
Jovan Laboratories, Inc., for research in the Department of Bacteriology on the value of chlorophyll as a bactericidal agent	3,000.00
Neurology	1,400.00
Kellogg (W. K.) Foundation, for the study of rheumatic fever in the Department of Practice of Medicine Keville (John J. Jr.), for the Palmer Wright Memorial	15,000.00
Fund	2.00
Kirby (Gustavus T.), for the Palmer Wright Memorial Fund	10.00
Knapp (Dr. Arnold), toward the maintenance of the Deutsches Haus	25.00
Kubler (Dr. George A.), toward the maintenance of the Deutsches Haus	20.00
Lafrentz (Ferdinand W.), toward the maintenance of the Deutsches Haus	100.00
Lamb (Dr. Albert R.), for a special scholarship in the	
Medical School	500.00
of Surgery	500.00
partment of Dermatology	1,600.00
Department of Surgery	4,050.00
ology	1,500.00
Lithuania (Government of), toward travelling expenses of an Instructor in University Extension	100.00
Lithuanian Professionals Association, in support of the courses in Lithuanian	60.00
McCoun (Frederic H.), for the Palmer Wright Memorial	
Fund	10.00
Study of obesity in childhood \$2,722.50 Study of coronary diseases and cardiac	
pain	
Problems of arteriosclerosis	
and aging	
of Medicine	\$32,522.50
	, , , , , , , , , , , , , , , , , , ,
Markle (John and Mary R.) Foundation, for the following purposes:	
Investigations on the Biological and Chemical effectiveness of high voltage	
and low voltage x-ray \$12,300.00	
Problems of arteriosclerosis, Department of Pathology 4,000.00	

Investigations on blood diseases, Department of Biological Chemistry \$4,000.00  Research on the biochemistry and genetics of canine cystinuria	
of Neurology         2,400.00           Research in Ophthalmology         4,400.00           Chemical Study of Serum, Department of Biological Chemistry         2,200.00	
Investigations on the Radioactive elements in Biochemistry	\$40,550.00
Marsh (Robert Jr.), for the Palmer Wright Memorial	10.00
Matheson (W. J.) Foundation, for the Department of Neurology	11,534.90
Deutsches Haus	10.00
Haus.  Montgomery (Col. Robert H.), for the purchase of books for the Library.	3.00 250.00
Moore (Mrs. William H.), for the purchase of Chinese Books for the Library	370.00
Research in the Department of Psychiatry\$1,150.00	
Salaries in the Department of Obstetrics and Gynecology	3,550.00
National Council of Jewish Women, for a scholarship in Columbia College	500.00
ment of Chemical Engineering	3,000.00
caries in the De Lamar Institute of Public Health National Tuberculosis Association, for the following pur- poses:	1,000.00
Research in the Department of Bacteriology	
of Medicine	5,530.17
New York State Library Association, for scholarships in the School of Library Service	900.00
Oppenheimer (Edgar D.), for the Palmer Wright Memorial Fund	5.00
ception	1,100.00
Research in acculturation	2,100.00

Personal Products Company, for special research in the Department of Obstetrics and Gynecology Phi Delta Epsilon Fraternity, for the purchase of books	\$1,200.00
for the Medical Library	50.00
Philip Morris & Company, for research in the Department of Pharmacology	2,000.00
iology, De Lamar Institute of Public Health	8,325.00
drocarbons of possible cancerigenic properties	100.00
Pope (Generoso), for scholarships	400.00
Presbyterian Hospital, for the following purposes: Otology Research, Department of Path-	
ology	
of Bacteriology	900.00
Proctor (Estate of Dr. Francis I.), for the following purposes:	
Experimental studies on the application of keratoplasty to trachoma \$1,000.00 Research in the Department of Ophthal-	
mology	2,500.00
Protestant Episcopal Society for Promoting Religion and Learning in the State of New York, for the Society's	
English Seminary Prize for 1939	60.00
Reichard (Gladys A.), for research in Anthropology	500.00
Reinach (Bertha M.), for research in Neurology	100.00
Reinach (Udo M.), for research in invertebrate Neurology. Research Corporation, for the following purposes: Advancement and extension of technical and scientific investigations, research and	1,000.00
experimentation	
Awards to distinguished scientists 5,000.00	10,250.00
Robinson (Louis H.), toward the tuition and dormitory fees of the student holding the Class of 1910 Scholarship	300.00
Rockefeller Foundation, for the following purposes: Research on constitutional aspects of di-	
sease\$14,000.00	
Studies of the common cold	
Research in chemical embryology 1,000.00	
Research in neuropathology	
Development of Far Eastern Studies 5,000.00	
Promotion of Japanese studies 2,500.00	
Research in the enzyme tyrosinase 1,600.00	
Research in Food Chemistry 5,500.00	
Research in the Department of Zoology 1,250.00	
Salaries in the Law School	
Salaries in the Department of Social Science. 1,000.00	
Research in the Social Sciences	
nese Books	
Research in the Department of Anatomy. 21,000.00	
Research on the biochemistry and genetics of canine cystinuria	

Research in the Department of Biological Chemistry	
Support of teaching and research in Neurology	
Toward the cost of a Tiselius Electrophoresis apparatus for the Medical School 3,000.00	\$171,952.77
Rosoff (Louis G ), for a prize in the University Extension courses in Accounting	25.00
Rubin (I. C.), for salaries, Department of Obstetrics and Gynecology	1,200.00
St. George (Dr. A. V.), toward the maintenance of the Deutsches Haus	20.00
Deutsches Haus	20.00
sches Haus. Smith (Professor J. Russell), for the Economic Geography	50.00
Gift, School of Business	1,375.00
garding juvenile delinquency in New York City	500.00
Sons of the Revolution, for a scholarship	500.00
Squibb (E. R. & Sons), for the following purposes:	
Fellowship in the Department of Biological	
Chemistry	
Research in synthetic organic chemistry 350.00	2,350.00
	_,
Steinbach (Dr. M. Maxim), for the Friedman Tubercu-	
losis Gift in the Department of Bacteriology	10.00
Stiefel (Carl F.), toward the maintenance of the Deut-	
sches Haus	100.00
Stiefel (Walther A.), toward the maintenance of the	
Deutsches Haus	100.00
Straus (Percy S.), for the study of multiple sclerosis in the	
Department of Neurology	2,000.00
Students of Columbia College, for the financial relief of	E#0 0E
students in the College	578.85
Students of the 1938 Summer Session, for the Summer Session Entertainment Fund	407.04
Takamine Ferment Company, for research in the Depart-	401.04
ment of Chemistry	250.00
Teachers College, for Research in the Social Sciences	4,000.00
Texas (The) Company, for research work on Thin Film	ĺ
Lubrication, School of Engineering	3,500.00
Thompson (Dr. John F.), for the Palmer Wright Mem-	
orial Fund	50.00
Twiss (J. Russell), for the Palmer Wright Memorial	10.00
Fund	10.00
United States Public Health Service, for the American	8,500.00
Journal of Cancer	0,000.00
ment of Chemistry	225.00
mone of Onemovi J	

Van Ingen (Dr. Philip), for the Huntington Portrait		
Gift	\$5.00	
osophy.,	1,800.00	
Warner (William R. & Company Inc.), for research on		
arteriosclerosis	5,000.00	
Department of Surgery	4,050.00	
Webster (Dr. Jerome P.), toward the purchase of the	4,000.00	
Jerome P. Webster Library of Plastic Surgery	500.00	
Weld (Mrs. Julia T.), for special research, Department		
of Pathology	1,200.00	
Whitney (William C.) Foundation, for the following pur-		
poses:		
Fellowship in the Department of Phil-		
osophy		
Scholarship in the Laboratory of Design	1 040 00	
Correlation, School of Architecture 440.00	1,940.00	
Wilckes (Ferdinand), toward the maintenance of the		
Deutsches Haus	150.00	
Wiley (W. O.), toward the cost of restoring the Class of		
1882 Window in Hamilton Hall	1,000.00	
Work (Lincoln T.), to supplement the income of the Wen-		
dell Medal Fund for 1938-39	2.89	
Zaretzki (Joseph), for the Palmer Wright Memorial	10.00	#C0 / 000 00
Fund	10.00	\$634,388.03

\$1,392,279.72

#### C. OTHER GIFTS:

Alumni and former students of Columbia University. Two Korean paintings.

Brooklyn Museum. Large and important collection of papers, plates from books, and rubbings relating to Indian Architecture, for the Avery Library.

Columbia Optometry Students Association. Nine new ophthalmometers, to be used in the work in Optometry in the Department of Physics.

Estate of Dr. W. W. Share. Twenty-four boxes of lantern slides, the major part of which has been added to the permanent collections of the Departments of Chemistry, Geology and Zoology.

Green (Norvin H.). On behalf of his uncle, the late Erskine Hewitt, a portrait of Abram S. Hewitt, a former Trustee of the University together with several medals which the latter won while in College.

Hellman (George S.). Various interesting articles, including class photographs, manuscripts, a copy, in bronze, of the Columbia Lion, a silver loving cup, and other material associated with his undergraduate life, for Columbiana.

Housing Study Guild. Collection of books, pamphlets, and other material on housing, for Avery Library.

Kilborn (Robert Charles). Rare specimens of early American building materials for the School of Architecture.

Magonigle (Mrs. Henry Van Buren). Large and important collection of architectural material, left by her husband, including numerous competition and presentation drawings and his travelling sketch books, for the Avery Library.

Necarsulmer (Edward). Bronze reproduction of "Diana" by F. McMonies, together with a marble pedestal, for the School of Architecture.

Neergaard (Dr. Arthur E.). A first edition of Pasteur's "Etudes sur la Biere," for the Library.

Rector of the State University of Sofia, Bulgaria. Three hundred and twenty-four volumes of important Bulgarian publications, for the Library.

Renwick (Mrs. James A.). Important additions to the Renwick Memorabilia already presented by her to Columbiana.

FREDERICK A. GOETZE.

Treasurer.



# FINANCIAL REPORT OF BARNARD COLLEGE 1938–39



## BARNARD COLLEGE

### BALANCE SHEET, JUNE 30, 1939

#### ASSETS

CURRENT FUNDS				
General Cash		\$22,239.37		
nation Board Unpaid Regular Session	\$2,252.53			
Faes, etc Undergraduate Association—Greek Games	1,979.01			
Curtains	409.00	4,640.54		
Accrued Interest on Securities Purchased		2,751.98		
Food and Supplies Prepaid Expense, etc Due from Other Funds (see co		1,101.69 1,538.18		
Loan Funds	15,915.00	19,235.18		
Deficit		51,506.94 <b>52,501.59</b>	\$104,008.53	
Restricted Due from Current Funds—G	eneral		46,890.50	\$150,899.03
LOAN FUND Notes Receivable Student Loan Committee of the	he Associate Alui	nnae		39,853.69
ENDOWMENT AND OTHER NONEX	PENDABLE FUNDS Endowment Funds	Special Funds		
Cash	\$959.46	\$61.00	\$1,020.46	
Investments (book value <sup>a</sup> ) Bonds Real Estate Mortgage and	\$2,372,280.61	126,736.50		
Certificates Preferred Stocks Common Stocks Note Receivable	3,007.00 1,178,100.45 1,311,209.81 2,500.00			
	\$4,867,097.87	\$126,736.50	\$4,993,834.37	
	\$4,868,057.33	\$126,797.50		\$4,994,854.83
PLANT FUNDS				
Invested in Plant Educational Plant Grounds Buildings	\$1,686,089.84 1,154,368.13			

a Market value approximately \$4,940,569.50.

Auxiliary Enterprises Plant Residence Halls Buildings Equipment Barnard Camp	1,254,332.49	\$4,301,337.61	
Gift Securities (book value) (see contra)		233.80	4,301,571.41 \$9,487,178.96

## BALANCE SHEET, JUNE 30, 1939

#### LIABILITIES

Current Funds		
General Notes Payable, Due October 1, 1939 \$40,000.00 Due to Current Funds—Restricted		
(see contra)		
Deferred Income Credits Student Room Deposits, etc	\$104,008.53	
Restricted Balance of Funds	46,890.50	\$150,899.03
Loan Fund		
Due to Current Funds—General (see contra) Principal of Fund	15,915.00	39,853.69
ENDOWMENT AND OTHER NONEXPENDABLE FUNDS		
Principal of Funds with Income Designated for Unrestricted Purposes		
to an Annuity Agreement 500,000.00		
\$4,996,034.03 Deduct: Net Loss on Consolidated Investments		
to June 30, 1939	4,868,057.33	
Principal of a Special Fund Whose Income is Subject to an Annuity Agreement	126,797.50	4,994,854.83
PLANT FUNDS		
Invested in Plant  Note Payable, Due October 6, 1939	\$174,000.00 3,320.18	
Principal of Plant Funds College Grounds Fund \$1,510,147.66 College Building Fund		
Barnard Camp Fund 10,316.34	4,124,017.43	
Gift Securities Awaiting Sale (see contra)	\$4,301,337.61 233.80	4,301,571.41
TOTAL LIABILITIES AND FUNDS		\$9,487,178.96
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# CONDENSED STATEMENT OF CURRENT INCOME AND EXPENDITURE

#### FOR THE YEAR ENDING JUNE 30, 1939

#### INCOME

EDUCATIONAL AND GENERAL		
Student Fees	\$402,080.20	
Unrestricted Funds \$119,246.64		
Restricted Funds	148,096.30	
Gifts, etc	17,759.70	
Sundry Income	1,246.73	\$569,182.93
AUXILIARY ENTERPRISES AND ACTIVITIES		
Residence Halls	\$219,037.65	
Educational Halls and Lunchroom, Summer Session	9,879.15	
Lunchroom, Regular Session	15,940.31	
Gifts, etc	100.00	
Sundry Income	820.84	245,777.95
OTHER NONEDUCATIONAL INCOME		
Scholarships, Fellowships, and Other Student Aid		
Endowment Investments \$32,942.18		
Gifts, etc	\$57,721.68	
Annuity Fund Investments	12,700.00	
Gifts for Miscellaneous Purposes	169.53	70,591.21
TOTAL INCOME		\$00a asa ao
TOTAL INCOME		\$885,552.09
EXPENDITURE		
EDUCATIONAL AND GENERAL		
EDUCATIONAL AND GENERAL General Administration and General Expense Instruction	\$118,677.33	
General Administration and General Expense Instruction Salaries of Columbia University Appointees \$373,000.00	\$118,677.33	
General Administration and General Expense Instruction Salaries of Columbia University Appointees Assistance and Expense		
General Administration and General Expense Instruction Salaries of Columbia University Appointees \$373,000.00	\$118,677.33 416,581.81	
General Administration and General Expense Instruction Salaries of Columbia University Appointees Assistance and Expense		
General Administration and General Expense Instruction Salaries of Columbia University Appointees Assistance and Expense		
General Administration and General Expense Instruction Salaries of Columbia University Appointees Assistance and Expense		
General Administration and General Expense Instruction Salaries of Columbia University Appointees Assistance and Expense	416,581.81	
General Administration and General Expense Instruction Salaries of Columbia University Appointees Assistance and Expense	416,581.81	
General Administration and General Expense   Instruction     Salaries of Columbia University Appointees   \$373,900.00     Assistance and Expense   20,693.56     Other Instruction   21,988.25     Library   Salaries   \$12,301.54     Books, etc.   5,930.37     Health Department   Salaries   \$9,513.25	416,581.81	
General Administration and General Expense Instruction Salaries of Columbia University Appointees Assistance and Expense	416,581.81	
General Administration and General Expense   Instruction     Salaries of Columbia University Appointees   \$373,900.00     Assistance and Expense   20,693.56     Other Instruction   21,988.25	416,581.81 18,231.91	
General Administration and General Expense            Instruction         \$373,900.00           Salaries of Columbia University Appointees         \$373,900.00           Assistance and Expense	416,581.81 18,231.91 14,376.29	\$657.047.59
General Administration and General Expense   Instruction     Salaries of Columbia University Appointees   \$373,900.00     Assistance and Expense   20,693.56     Other Instruction   21,988.25	416,581.81 18,231.91	\$657,047.59
General Administration and General Expense   Instruction     Salaries of Columbia University Appointees   \$373,900.00     Assistance and Expense   20,693.56     Other Instruction   21,988.25	18,231.91 14,376.29 89,180.25	\$657,047-59
General Administration and General Expense   Instruction     Salaries of Columbia University Appointees   \$373,900.00     Assistance and Expense   20,693.56     Other Instruction   21,988.25	18,231.91 14,376.29 89,180.25	\$657,047-59
General Administration and General Expense Instruction Salaries of Columbia University Appointees Assistance and Expense Other Instruction  Library Salaries Assistance and Expense Salaries Assistance and Expense Salaries Salaries Salaries Auxiliary Salaries Salaries Salaries Salaries Salaries Salaries Salaries Auxiliary Salaries Salar	18,231.91 14,376.29 89,180.25 \$167,743.08 10,570.51	\$657,047.59
General Administration and General Expense   Instruction     Salaries of Columbia University Appointees   \$373,900.00     Assistance and Expense   20,693.56     Other Instruction   21,988.25	18,231.91 14,376.29 89,180.25	\$657,047.59 198,198.40

OTHER NONEDUCATIONAL EXPENSE	
Scholarships, Fellowships, and Other Student Aid \$69,270.1	3
Annuities	
Supplementary Appropriations 16,161.1	
Miscellaneous Expenditures	8 98,449.51
TOTAL EXPENDITURE	\$953,695.50
EXCESS OF EXPENDITURE OVER INCOME	
Educational and General	6
Auxiliary Enterprises and Activities 47,579.5	5
Other Noneducational Transactions	0
NET EXCESS OF EXPENDITURE OVER INCOME, YEAR ENDING JUNE 30, 1939	. 68,143.41
	\$885,552.09

# FINANCIAL REPORT OF THE COLLEGE OF PHARMACY

1938-39



# COLLEGE OF PHARMACY

# BALANCE SHEET, JUNE 30, 1939

#### ASSETS

Real Estate													
	50,000.00 50,000.00 \$500,000.00												
_													
Equipment													
Library	50,000.00 20,000.00												
Furniture and Fixtures	79,217.00												
Apparatus and Chemicals	////												
Materia Medica	40,932.54												
Pharmacy	22,824.81												
Chemistry	33,305.88 246,280.23												
Invested Funds													
Bonds-Market Value	51,315.75												
Savings Bank Accounts	14,598.84 65,914.59												
-													
	141.76												
Petty Cash	50.00 191.76												
Total Assets	\$812,386.58												
LIABILITIES													
LIABILITIES													
Temporary Loans	\$ 44,500.00												
Temporary Loans	\$ 44,500.00												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship	\$26,000.00 11,895.65												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship	\$26,000.00 11,895.65 4,084.10												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund	\$26,000.00 11,895.65 4,084.10 1,686.48												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund	\$26,000.00 11,895.65 4,084.10 1,686,48 1,385.07												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Alumni Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Alumni Fund Diekman Prize Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14 494.32												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Alumni Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Alumni Fund Diekman Prize Fund Alumni Fund Alumni Fund Alumni Endowment Fund Alumni Endowment Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14 494.32 5,915.99												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Alumni Fund Diekman Prize Fund Endowment Fund Alumni Endowment Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14 494.32 5,915.99 1,175.90 55,423.60												
Temporary Loans Restricted Funds Bigelow Fellowship Plant Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Alumni Fund Diekman Prize Fund Endowment Fund Alumni Endowment Fund Unrestricted Funds Breitenbach Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14 494.32 5,915.99 1,175.90 \$5,423.60												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Alumni Fund Diekman Prize Fund Endowment Fund Alumni Endowment Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14 494.32 5,915.99 1,175.90 55,423.60												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Alumni Fund Diekman Prize Fund Endowment Fund Alumni Endowment Fund Entowment Fund Alumni Endowment Fund Unrestricted Funds Breitenbach Fund Investment Fund Depreciation	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14 494.32 5,915.99 1,175.90 \$5,423.60												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Diekman Prize Fund Diekman Prize Fund Urestricted Fund Unrestricted Funds Breitenbach Fund Investment Fund	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14 494.32 5,915.99 1,175.90 \$8,790.99 1,700.00 10,490.99												
Temporary Loans Restricted Funds Bigelow Fellowship Plaut Fellowship Seabury Scholarship Student Loan Fund Dohme Prize Fund Olshansky Medal Fund Hostmann Memorial Fund Alumni Fund Diekman Prize Fund Endowment Fund Alumni Endowment Fund Entowment Fund Alumni Endowment Fund Unrestricted Funds Breitenbach Fund Investment Fund Depreciation	\$26,000.00 11,895.65 4,084.10 1,686.48 1,385.07 692.93 529.02 1,564.14 494.32 5,915.99 1,175.90 55,423.60 \$8,790.99 1,700.00 10,490.99												

#### INCOME AND EXPENSE ACCOUNT

#### FOR THE YEAR ENDING JUNE 30, 1939

#### INCOME

Tuition Fees Apparatus and Breakage Membership Dues Miscellaneous			:						:		\$		530 210	.21 .71 .00	
TOTAL RECEIPTS															\$89,570.29
EXPENSES															
Salaries and Administrative Ex	срепѕе	s.									\$1	04,	588	.31	
Printing and Advertising	· .											2,	125	.37	
Library													711	.33	
Educational Supplies														.06	
Building Maintenance												6,	801	.43	
Interest	•		•			٠	•	٠	•			Ι,	307	.99	
TOTAL DISBURSEMENTS .															\$121,256.49
EXCESS OF EXPENSES OVER	Inco	ME													\$31,686.20

# FINANCIAL REPORT OF TEACHERS COLLEGE 1938–39



## TEACHERS COLLEGE

## BALANCE SHEET, JUNE 30, 1939

#### ASSETS

I. Current Funds Assets				
Cash			\$145,898.44	
Accounts and Notes Receivable, Less Reserve			102,990.20	
Investments at Cost, Less Amortization			382,357.48	
Inventories of Foods and Supplies			46,244.95	
Inventories of Bureau of Publications			54,701.43	
Deferred Charges			111,605.04	
Accumulated Deficits			844,221.81	
Total Current Assets and Accounts				\$1,688,019.35
II. LOAN FUNDS ASSETS				
Cash			\$ 9,811.53	
Student Loan Notes Receivable, Estimated Collectible	е.		184,453.31	
Welfare Fund Notes Receivable			3,283.00	
		-		
Total Loan Fund Assets				197,547.84
III. ENDOWMENT FUNDS ASSETS				
Cash			37,490.25	
Securities at Cost, Less Amortization				
			1,434,279.81	
real Estate Correge residence ratio	•	٠.	-,4,4,2,7,9102	
Total Endowment Funds Assets				8,696,591.88
IV. PLANT FUNDS ASSETS				
A. Unexpended				
Cash		. :	\$ 2.303.74	
Investments at Cost			24,875.00	
B. Invested in Plant				
Educational Activities Plant			8,231,108.25	
Auxiliary Activities			2,470,464.08	
		-		
Total Plant Funds Assets	•			10,728,751.07
V. AGENCY FUNDS ASSETS				100,374.53
Total Assets				\$21,411,284.67

# BALANCE SHEET, JUNE 30, 1939

#### LIABILITIES

I. CURRENT LIABILITIES AND FUNDS	
A. General  Notes Payable \$700,000.00  Current Liabilities 418,962.92  Deferred Credits to Income . 29,459.58  Working Capital 65,403.06 \$1,213,825.56	
B. Restricted Current Funds for Designated Purposes \$462,502.21 Unexpended Restricted Endowment Income	
Total Current Liabilities and Funds	\$1,688,019.35
II. LOAN FUNDS (LOANABLE PRINCIPAL)	
Loan Funds for Teachers College Students	
Total Loan Funds	197,547.84
III. ENDOWMENT FUNDS AND LIABILITIES	
General Endowment Funds	
To LE L. C. P. L. LYLLING	
Total Endowment Funds and Liabilities	8,696,591.88
A. Plant Funds Unexpended \$ 27,178.74 B. Plant Funds Invested in Plant	
In Educational Activities Plant 8,131,108.25 In Auxiliary Activities Plant	
In Auxiliary Activities Plant	
Total Plant Funds and Liabilities	10,728,751.07
V. Agency Funds	100,374.53
TOTAL LIABILITIES AND FUNDS	\$21,411,284.67

#### STATEMENT OF CURRENT INCOME

#### FOR THE YEAR ENDING JUNE 30, 1939

I. EDUCATIONAL AND GENFRAL	
1. Student Fees from the College and Elementary and Secondary Schools .	\$2,297,754.23
2. Endowment and Funds Functioning as Endowment General Purposes \$132,576.47 Restricted Purposes	255,587.61
3. Gifts, Grants, and Reserves Gifts and Grants for Designated Purposes \$155,058.44 Reserves for Designated Purposes 5,006.92	160,065. <b>3</b> 6
4. Sales and Services of Educational Departments	17,441.78 27,000.00 26,400.38
Total Educational and General Income	\$2,784,249.36
II. AUXILIARY ENTERPRISES AND ACTIVITIES	
1. Residence Halls       \$306,543.53         2. Dining Halls       171,978.78         3. Supply Room       6,959.20         4. Bureau of Publications       193,616.46	679,097.97
III. OTHER NONEDUCATIONAL INCOME	
1. Fellowships and Scholarships Restricted Endowment \$4,596.62 Gifts and Grants	4,771.62
TOTAL INCOME	\$3,468,118.95

#### STATEMENT OF CURRENT EXPENDITURES

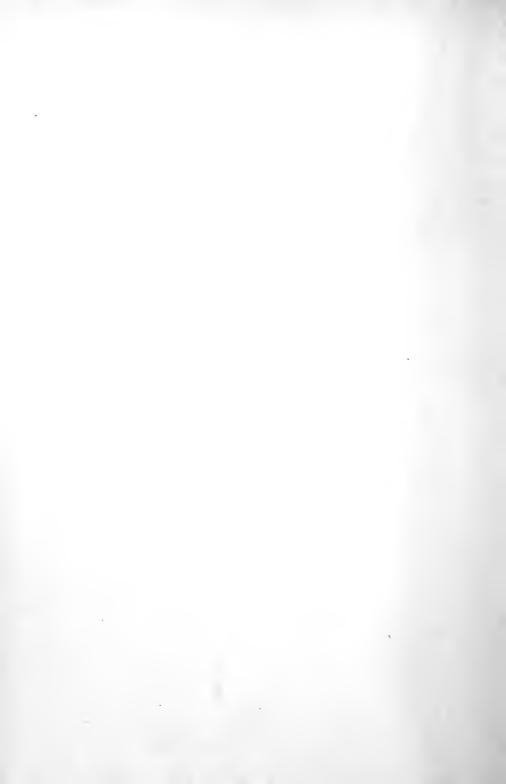
#### FOR THE YEAR ENDING JUNE 30, 1939

I. EDUCATIONAL AND GENERAL		
1. General Administrative Offices		
Salaries	\$236,881.39	
Supplies and Expense	90,057.81	\$326,939.20
Supplies and Expense	90,0)/.01	\$520,959.20
2. General Expense		
Placement Office	\$43,331.70	
Public and Alumni Relations	11,658.26	
General Stenographic Office	24,304.31	
Insurance and Retirement of Employees	97,275.09	
Student Welfare and Activities	14,573.25	
Institutional Travel, Entertainment, and Activities.	23,661.51	
Other General Expense	3,604.62	218,408.74
3. Resident Instruction and Departmental Research		
Collegiate Instruction and Research	\$1,216,731.59	
Elementary and Secondary Schools —		
Instruction and Research	408,126.37	1,624,857.96
4. Organized Research		
Bureau of Educational Research in Science	\$ 8,701.63	
Institute of Educational Research	91,934.92	
Institute of Practical Science Research	23,875.77	
Lincoln School Research	6,575.30	_ ,
Appropriated for Research	19,000.00	150,087.62
5. Extension		
Extramural Courses		0
Extramutal Courses		54,805.01
6. Libraries		113,649.97
	,	23-42-21
7. Operation and Maintenance of Plant and Other General		
Services		
Care of Buildings and Furniture	\$118,197.90	
Repair of Buildings and Furniture	80,540.79	
Heat, Light, Power, Water, and Gas	77,479.72	
Insurance and Taxes	12,528.45	
Rent	20,000.00	308,746.86
77 . 1		
Total		\$2,797,495.36
II A		
II. AUXILIARY ENTERPRISES AND ACTIVITIES	4 0	
1. Residence Halls	\$345,817.13	
2. Dining Halls	174,802.24	
3. Supply Room	7,893.72	( (-0
4. Bureau of Publications	188,115.26	716,628.35
III. OTHER NONEDUCATIONAL EXPENSE		
i. Interest	\$ 2,516.32	
2. Fellowships, Scholarships, and Prizes	47,736.12	50,252.44
	4/,/30.12	
TOTAL CURRENT EXPENDITURES <sup>a</sup>		\$3,564,376.15

<sup>&</sup>lt;sup>a</sup> In addition to current expenditures of \$3,564,376.15 expenditures were made for capital outlay amounting to \$111,423.78 of which \$83,978.85 was for educational activities and \$27,444.93 for auxiliary activities.

# FINANCIAL REPORT OF BARD COLLEGE

1938-39



#### BARD COLLEGE

### BALANCE SHEET, JUNE 30, 1939

#### ASSETS

Cash																			\$	6,957	.33
Inventories of Mat	erial	ls ·	and	Su	DP.	lies														4,955	
Notes and Account	s Re	cei	ival	sle																16,807	
Unexpired Insurance																				5,435	.67
Securities (at book						Ť	•													157,032	2.58
Rental Property (a						•	:	•												10,032	2.64
Land, Buildings, a						•		•	•	•	•	•							1	,382,911	1.47
Excess of Liabilitie						:		:	÷											224,240	
																			\$1	,808,373	3.52
Loans-Due from	Oth	er	Fu	nds																3,529	).25
TOTAL ASSETS																			\$1	,811,902	2.77
								LI	AΒ	ILI	TIF	ES									
Accounts Payable																			\$	9,29	
Notes Payablea	•	•	•	Ť	Ĭ.	Ċ	Ċ													232,70	0.00
Deferred Income	•	•		•	•																
Student Fees																\$	975	.00			
Contributions	•	•	•	•	·	·	Ċ									2,	015	.00		2,99	0.00
Contributions	•	•	•	•	٠	•	·	·	-					-	_		_			169,14	. 06
Special Endowmen	its							•	•		•	•	•	•	•	•	•	•		109,14	4.00
General Funds Unrestricted End	lowr	me	nts												ş	4.	189	.58			
Student Loan F			1113	•	•	•	Ċ									10	675	.00			
Permanent Fund			•	•	•	•	•	•		i					Ι,	379	,382	2,22		1,394,24	6.80
Permanent Fund	us	•	•	•	•	•	•	•	•										_		
																			\$	1,808,37	3.52
Loans-Due to Ot	ther	Fυ	nd	s .									٠					•		3,52	9.25
TOTAL LIABII	ITIE	ES.																	\$	1,811,90	2.77
TOTAL ZIADI		-	•	•															=		

# INCOME AND EXPENSE ACCOUNT—GENERAL FUNDS

#### FOR THE YEAR ENDING JUNE 30, 1939

#### INCOME

From Students												٠		٠			٠	\$123,586.73
From Faculty and Staff Residence Halls, etc.															13,2			
Dining Hall				•	•	•	•	٠	•	٠	٠	٠			2,5	97.	20	15,822.50
Other Dining Hall Inco	nne																	7,839.24
From Department of Bu	ildi	ngs	and	G	our	ads		•						•	•	٠	•	1,954.63
From Endowments .	•	•	•	٠	٠	٠	٠	٠	•	٠	٠	٠	•	٠	٠	•	•	8,378.43 59,925.39
From Gifts	•	•	٠	٠	•	•	٠	•	•	٠	٠	•	•	•	•	•	•	853.22
Other Income	•	٠	٠	٠	٠	•	•	•	•	•	•	•	•	•	•	•	•	
																		\$218,360.14

a Payment of interest deferred to October 15, 1941.

#### **EXPENSES**

Education and Administration														\$159,097.50
Buildings and Grounds														55,804.47
College Store														185.40
Interest on Debt	•		•	•	•	٠	٠	•	٠	٠	٠	٠	•	312.50
Surplus for year ended June 30	o, 19	)39ª												\$215,399.87 2,960.27
														\$218,360.14

<sup>&</sup>lt;sup>a</sup> After giving effect to grant of \$30,000 from Columbia University.

